



Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

Archaeological Watching Brief



for Lidl Great Britain Ltd

CA Project: CR0105 CA Report: CR0105_1

April 2021



Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

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SUMMARY

Project Name: Carmarthen Police Station

Location: Friars Park, Carmarthen, Carmarthenshire

NGR: 240831 219897 **Type:** Watching Brief

Date: 02 August - 06 December 2019

Planning Reference: W/37401

SMC: CM009 The Bulwarks (Civil War)

Location of Archive: Carmarthenshire County Museum/RCAHMW, Report deposited to

the Historic Environment Record, Dyfed Archaeological Trust.

Accession Number: TBC (Number has been applied for)

Site Code: CARM 19

An archaeological watching brief was undertaken by Cotswold Archaeology during groundwork associated with the Lidl development at the former Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire at Scheduled Monument CM009, The Bulwarks.

An undated ditch and pit were revealed, but no evidence for further civil war period archaeology was encountered. Negative evidence within the current trenching for a continuation of the visible bulwark earthworks at the southern extremity might perhaps indicate a perpendicular return to the south-west here as originally thought.

1. INTRODUCTION

- 1.1 Between August and December 2019 Cotswold Archaeology (CA) carried out an archaeological watching brief for Lidl Great Britain Ltd at the former Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire centred on National Grid Reference (NGR) 240831 219897 (see Figure 1), hereafter referred to as the 'site'. The watching brief was undertaken to fulfil a condition attached to a planning consent for the demolition of existing buildings and development of a Lidl store with associated parking, delivery arrangements and widening of current access road (Planning ref: W/37401), Scheduled Monument consent associated with these works (CM009, 21 June 2019), and Scheduled Monument consent associated with unauthorised works (CM009, 10 September 2019).
- 1.2 A Heritage Assessment had previously been carried out (CA 2019a). A Class 7 archaeological evaluation (granted 20 July 2018) had also previously been undertaken (CA 2018, attached). The watching brief was subsequently carried out in accordance with the Scheduled Monument Consent and accordance with the a planning consent. The Scheduled Monument Consent was granted by Cadw (the consenting authority for scheduled monuments) on the 21 June 2019 for the development works. A subsequent unauthorised construction of a path required a further consent and was granted by Cadw on the 10 September 2019, for the removal of the unauthorised works. The scope of works in respect to the planning application was defined by Mike Ings of the Dyfed Archaeology Trust, archaeological advisor to the Carmarthenshire County Council (CCC). A detailed Written Scheme of Investigation (WSI) was produced by CA (2019c) and approved by the CCC acting on the advice of Mike Ings and Cadw. A further WSI was produced in respect of the reinstatement of the unauthorised works and also by Cadw. The fieldwork also followed Standard and guidance: Archaeological watching brief (CIfA 2014), the information gathered during the previous investigations (DAT 2008, CA 2019b) and Planning Policy Wales, Edition 10 2018 and Technical Advice Note 24: The Historic Environment 2017. It was monitored by Louise Mees (RIAMA) for Cadw, including site visits on the 2 and 5 August, 23 September and 5 December in 2019. A further meeting with Louise Mees was had on 12 March 2020 (with the finished Lidl building in public use) in regards to the general preservation of the monument and position of the monument display boards.

The site

- 1.3 The proposed development area is approximately 1.3ha and comprises the buildings of a former police station and associated car parks and access roads adjacent to the earthworks of The Bulwarks (Civil War), CM009 Scheduled Monument. It is bounded to the west by Morfa Lane, to the south by the A4242, to the east by Friars Park and to the north by residential properties and further earthworks of The Bulwarks. Within the eastern area of the proposed development are the bank and southern bastion remnant of the Scheduled Monument. The site lies at approximately 17m above Ordnance Datum (aOD), but occupies a point of high ground, sloping steeply downwards to the roads in the south and west.
- 1.4 The underlying bedrock geology of the area is mapped as Tetragraptus Beds Mudstone, sedimentary bedrock formed approximately 466 to 478 million years ago in a local environment dominated be deep seas. Superficial deposits of Devensian Sand and Gravel are also recorded. These are glaciofluvial in origin, forming up to two million years ago in ice age conditions (BGS 2019). This is consistent with the geology encountered during the evaluation (CA 2019b).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site has previously been the subject of a Heritage Assessment (CA 2019a, attached). The assessment contains detailed information but this section summarises the Assessment's findings.
- 2.2 Carmarthen was the *civitas* of the *Demetae* tribe known as *Moridinum* (meaning *sea fort*) during the Romano-British period. The initial fort is believed to date to about AD75, possibly replacing the Iron Age hillfort on Merlin's Hill *c*. 2km to the north-west of the site. By AD120 the civilian *vicus* had been established and a new fort built further to the south, by the river, on the location of the medieval castle *c*. 600m to the east of the site. Although no evidence has been recorded of extra-mural Romano-British settlement within the wider area of the town, the proposed development area may have been close to a conjectured Romano-British road, *c*. 170m to the north of the site (*ibid*.).

- 2.3 In the early medieval period the settlement was known as *Llanteulyddog* and its strategic importance was such that a castle was built in 1094. The castle was destroyed and rebuilt several times until 1223 when a town wall was constructed. During the 13th century Franciscan friars established themselves in the town and by 1284 had their own friary buildings on Lammas Street, 70m to the east of the site (*ibid.*).
- In the post-medieval period Carmarthen's main income centred on agriculture and the wool trade, with mills and wool mills sited around the town (*ibid.*). During the Civil War the town was a Royalist stronghold, and the aging medieval fortifications were strengthened around the town. This included the western part of the town, around and within the now dissolved Franciscan friary; this resulted in the earthworks of The Bulwarks, which were constructed over parts of the friary grounds (*ibid.*). Archaeological excavations within the Friar's Park area, *c.* 60m to the east of the site, revealed several Civil War trenches and features cutting through the medieval remains of the Friary, and evidence of earlier medieval layers (James 1995; Manning 1998).

'The Bulwarks' Scheduled Monument (Cadw ref: CM009)

- 2.5 Cadw's Scheduled Monument description states that 'The monument comprises the remains of earthwork defences dating to the Civil War, 1642-51 and built to protect west Carmarthen then held for the Royalists. Further stretches existed originally but these have now been destroyed. The earthworks comprise the remains of low wide walls and associated ditches designed to absorb shot combined with bastions to protect the walls and for positioning artillery. A central section of bank survives to a height of c. 0.7m fronted to the west by a ditch c. 1.6m deep externally and 2.3m above the crest of the bank. North and south of this are two polygonal projecting bastions. Only the northern is well preserved, with the depth of the ditch being c. 2m below the exterior and 4m below the crest of the now slight bank' (Cadw 2018).
- 2.6 The Bulwarks are considered to be one of the best examples of Civil War earthern town defences that still remain in Britain. They would have originally formed part of a larger *enceinte*, enclosing the old medieval walls and suburbs of Carmarthen with lengths of bank and ditch, interspersed with regularly spaced bastions to provide platforms for artillery and flanking musketry. O'Neill references an additional section which survived in a field known as Parc y Bulwark but was demolished in the 1860's (O'Neill 1938), which suggests that at one time the defences did encircle the town.

- 2.7 It is likely The Bulwarks were constructed after the Royalists under Colonel Charles Gerard recaptured the town from Parliament in June 1644 where he is said to be 'fortifying it for the King'. It is likely that these defences replaced the earlier 'mud wall' which is noted as facing the Parliamentarians during their capture of the town in April 1644 under Colonel Laugharne (O'Neill 1938). James has thrown this assertion into question, suggesting that there is little documentary evidence of the 'mud wall' which pre-dates the arrival of Gerard, although he does concede that it is likely Laugharne faced some form of defence in early 1644 which supplemented the preexisting medieval walls (James 1991). This is further reinforced by Laugharne himself, who gave some impression of the size of the existing defences, stating that the perimeter required at least 1000 men to defend it (Osborne 2004). It is probable that Gerard, an experienced soldier, modified the existing defences into a more modern style learnt during his time in the Low Countries and that the monument which survives today is largely the result of his work (Harrington 1992, O'Neill 1938, James 1991). Evidence of an earlier phase of defensive work was identified during excavations at Friar's Park, immediately east of the monument, which James suggests is from a poorly planned and possibly unfinished earlier defensive system. Certainly the sheer scale of the ditches (4.4m deep and c. 6m wide) suggests a defensive function and the recovered dating evidence and stratigraphic relationship with earlier features suggests a mid-17th century date for construction. If this is the case, the layout of The Bulwarks does not appear to respect the earlier identified defences and as such likely represents a newly planned defensive system. Although it is possible older defences still remained extant as internal defensive points, with the evidence from the upper fills of the ditches identified at Friars Park, suggesting that in some cases they were not entirely backfilled until the 19th century (James 1991). Harrington suggests that it is likely the Friar's Park ditches were built as earlier defences in 1643 or as an internal, secondary line of defence to supplement The Bulwarks (Harrington 2004).
- 2.8 The Bulwarks monument mostly survives well, however the southern demi-bastion, which likely formed the south-western corner of the whole *enceinte*, has seen considerable modern disturbance, likely during construction groundwork for the Police station. This has included the creation of an access through the monument immediately north of the demi-bastion and the general levelling and landscaping of the demi-bastion itself. The layout of the southern part of the monument is therefore

considerably changed from that which was recorded during a survey in 1937 (O'Neill 1938).

Evaluation (CA 2019), (Fig. 1)

2.9 Four evaluation trenches were dug in April 2019 (CA 2019b). Possible evidence associated with the Civil War defences, 'The Bulwarks' Scheduled Monument, was noted in Trench 2 in the form of a deposit containing pottery of 16th or 17th century date, animal bone and a clay pipe fragment, potentially part of the monument make up, with another possible deposit identified in Trench 1. Trench 4 was a larger strip, map & record area alongside the defensive ditch of 'The Bulwarks' and a small number of undated features were identified, most notable of which were two parallel ditches likely to pre-date the earthwork. There was no evidence of any additional defensive features than previously identified external to the ditch in the form of a glacis, defensive pits or a wider counter scarp, with the whole area showing evidence of having been disturbed and levelled in the modern period. A prior watching Brief had been undertaken in 2008 by Dyfed Archaeological Trust (DAT 2008), but no archaeology was revealed.

3. AIMS AND OBJECTIVES

- 3.1 The objectives of the archaeological works were:
 - to monitor all groundworks associated with the development and to monitor the removal of unauthorised objects and structures from within the scheduled monument, and to identify, investigate and record all significant buried archaeological deposits, in particular any Civil War Deposits, revealed by these groundworks.
 - 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.

4. METHODOLOGY

- 4.1 The fieldwork followed the methodology set out within the WSI (CA 2019c). An archaeologist was present during intrusive groundworks comprising fourteen more trenches (totalling 1616m²) to the four already dug at the evaluation stage (totalling 327m² CA 2019b) (Figure 2).
- 4.2 Where archaeological deposits were encountered written, graphic and photographic records were compiled in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*.
- 4.3 The archive from the Watching Brief is currently held by CA at their offices in Andover. Subject to the agreement of the legal landowner it will be deposited with Carmarthenshire County Museum/RCAHMW, accession number TBC, along with the site archive. A summary of information from this project, set out within Appendix B, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGURES 2-6)

Geology (Figures 2, 5-6)

5.1 The natural geological substrate consisted of mid reddish brown, grey and light brown clayey silt and clayey coarse sand with 55% poorly sorted and rounded mudstone/sedimentary stone. It was revealed at an average depth of 0.62m below present ground level (bpgl) across all excavated areas though was revealed at its deepest in Trenches 5 and 8 in the north-west corner of site at 1.05m and 1.14m bpgl respectively. This was overlain by mid-grey/red/brown clay/silt subsoil with 10-45% mudstone/sedimentary stone averaging 0.19m in thickness, which was in turn sealed by 0.18m of mid-brown silt/clay buried soil in Trenches 8, 15 and 17. Other than these trenches, the subsoil was either overlain by an average of 0.29m dark brown/grey clay/silt topsoil or by 0.4m made ground (where the topsoil had been truncated), with the exception of Trenches 8 and 9 where 0.5m of 'Type 1' made ground was a further layer above the topsoil. Significantly there was no subsoil (if but 0.04m in Trench 14) at the eastern end of Trench 17 and into Trench 18 at the crest of the hill. Ditch 1803, was cut immediately under 0.15m of topsoil here, with little evidence for truncation of the feature, particularly given the height of the southern Bastion at this point being close to the overall plateau maximum across the

site, however **Trench 18** as a whole had been largely truncated at its eastern end by the former Police Station development.

Archaeology (Figure 2-4)

- 5.2 Trenches 5-10 were situated outside of the two areas of the site which comprise the Scheduled Monument. Trenches 15 and 16a and b, were within the north-eastern portion of the Scheduled area, adjacent to the previous evaluation Trench 4 (see Figure 2). Trenches 11-14 were small interventions within the southern portion of the Scheduled Monument, whilst Trenches 17 and 18 were adjacent to and impinged upon the northern boundary of that southern portion. Trenches 11-14 and 17 related to the additional programme of works associated with the unauthorised construction.
- No archaeology was revealed in **Trenches 5-9** (outside the Scheduled Monument area) and **11-17** (within or adjacent to the Scheduled Monument area). Only a shallow undated pit (**1003**) was revealed in **Trench 10** (outside the Scheduled Monument area) and a probable modern ditch, (**1803**), in the section of **Trench 18** (within or adjacent to the Scheduled Monument area), the latter having been truncated by the former police station road entrance way. In Trenches 5-9, and most of Trench 10, the only features and deposits seen were part of the former police station structures. Modern features associated with the police station were also seen in Trench 18, and Trench 17. In the latter case, the area of the unauthorised works only exposed modern structures which had already impacted the area (see Figure 5).
- 5.4 Pit **1003** in Trench 10 measured 1.34m long by 1.2m wide and had a depth of 0.13m. It was filled with a single secondary fill of mid-grey/brown silt/clay with 25% <70mm sub rounded mudstone (**1004**), but produced no dateable finds.
- Ditch **1803** in Trench 18 measured 1.5.3m wide by 0.47m deep and may have been a slightly oblique profile. It had been cut from high up, immediately below the 0.15m layer of topsoil below the turfline (see Figure 4). There was little evidence for truncation of the feature, particularly given the height of the southern Bastion at this point being close to the overall plateau maximum across the site, . Furthermore, because it was seen in section a clear orientation in plan could not be ascertained. The profile would suggest that the ditch was heading in a northerly direction. The ditch was filled by a single secondary fill of light brown silt/clay with 5% mudstone and sedimentary pebbles (**1804**), but provided no dateable material. However

Trench 18 as a whole had been largely truncated at its eastern end by the former Police Station development.

8. DISCUSSION

- 8.1 No finds or features were identified during the Lidl development groundwork programme that would indicate the continuation of the Civil War 'Bulwark' earthworks. The negative evidence would suggest either the potential course outlined in the Heritage Assessment is correct (CA 2019a, Figure 1-2) where the southern extremity of the earthworks returns south-west (where there was an absence of trenching) skirting around the southern bastion, or that the earthworks were never historically finished around the southern bastion.
- 8.2 **Trench 18** showed as had **Trench 3** of the evaluation (CA 2019b), that the south-east corner of the Scheduled Monument has been largely truncated by modern groundwork associated with the development of the former Police Station, specifically the access to it, with no evidence for the Civil War ditch continuing its trajectory here (Figures 2 and 5).
- 8.3 Due to the nature of the modern road truncation in **Trench 18** the orientation of ditch **1803** could not be ascertained in plan, though its section profile would suggest a northerly direction and it may conceivably be a perpendicular return on ditches **403** or **415** in evaluation **Trench 4**, a trajectory which might tenuously include Civil War period deposit **201** in **Trench 2** from the evaluation (CA 2019b, Figure 2). This latter deposit , though truncated on its southern side, had a profile that suggested it could be the very edge of a ditch, and further still, **201** was similar to fill **1804** of Ditch **1803**.
- 8.4 If it is the case that deposit **201** and ditch **1803** are the same feature, then the ditch at least goes out of use by the post medieval period and would have been backfilled prior to the construction of the Bulwarks.
- 8.5 The trajectory of ditch **1803**, may alternatively be synonymous with the field enclosure boundary depicted on the 1786 Lewin's street plan and the 1837 Tithe Map of the Parish of St. Peter (CA 2019a), however despite mapping inaccuracies, it would seem that the north-south boundary depicted here is further to the west of the extant earthworks than ditch **1803**.

8.6 The watching briefs associated with the authorised and unauthorised work on the Scheduled Monument, The Bulwarks, have only added slightly to the understanding gained during the evaluation. The part of the Scheduled Monument impacted by both the authorised and the unauthorised works on the site only revealed previously disturbed ground and structures associated with the construction of the former police station. It therefore appears that no further disturbance occurred to this nationally important heritage asset over that which had been caused during the 20th century by the use of the area as a police station.

9. CA PROJECT TEAM

Fieldwork was undertaken by Jeremy Clutterbuck, assisted by Sam Wilson and Adam Howard. The report was written by Jeremy Clutterbuck. The illustrations were prepared by Ryan Wilson. The archive has been compiled by Richard Paxford, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Oliver Good.

10. REFERENCES

- BGS (British Geological Survey) 2015 Geology of Britain Viewer http://mapapps.bgs.ac.uk/geologyofbritain/home.html Accessed 7 August 2019
- Cotswold Archaeology (CA) 2019a, Former Police Station, Carmarthen, Carmarthenshire:

 Heritage Assessment. Report No: **18170**
- CA 2019b Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire:

 Archaeological Evaluation and Strip, Map & Record. Report No: 6791.1
- CA 2019c Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire: Written Scheme of Investigation for an Archaeological Watching Brief
- Dyfed Archaeological Trust (DAT) 2008. *Dyfed Powys Police Authority, Friars Park,*Carmarthen: Archaeological Watching Brief. Report No: 2008/64

Harrington, P. 1992, Archaeology of the English Civil War, Shire Publications Ltd

Harrington, P. 2004, English Civil War Archaeology, B T Batsford

James, T. 1991, 'Carmarthen's Civil War Defences. Discoveries at Carmarthen Greyfriars Excavations 1983-1990' in *The Carmarthenshire Antiquary XXVII*, The Carmarthenshire Antiquarian Society

James, T. 1995, Excavations at Carmarthen Greyfriars 1983-1990

Manning, A. 1998, Carmarthen Greyfriars, Carmarthen: the 1997 rescue excavations and watching brief on the site of the choir and area north of the friary, Cambria Archaeology

O'Neill, B. H. St. J. 1938. The Bulwarks, Carmarthen. Archaeologia Cambrensis 93

Osborne, M. 2004, Sieges and Fortifications of the Civil Wars in Britain, Partizan Press

APPENDIX A: CONTEXT DESCRIPTIONS

Trench No	Context	ntext Type Fill of Context Interpretation Context Description		Context Description	Length (m)	Width (m)	Depth/ thickness (m)	Spot- date	
5	500	Layer		Made ground	Tarmac and topsoil - Mixed brownish grey sandy clay with moderate CMB, slate and stone inclusions.	22.8	9.7	0.75	Mod
5	501	Layer		Subsoil	Mid reddish brown clayey silt. Abundant shale and slate inclusions.	22.8	9.7	0.3	
5	502	Layer		Natural	Mid brown sandy silt. Moderate shale and slate gravel inclusions.	22.8	9.7	1.05+	
6	600	Layer		Topsoil	Mid brown silty clay. Frequent stone and rubble inclusions.	68.04	2.29	0.4	Mod
6	601	Layer		Subsoil	Mid orange brown silty clay. Rare charcoal and stone inclusions.	68.04	2.29	0.2	
6	602	Layer		Natural	Light grey and orange silty clay. Rare stone inclusions.	68.04	2.29	0.17+	
7	700	Layer		Made ground	Made ground	34.1	1.2	0.5	Mod
7	701	Layer		Subsoil	Mid brown and orange silty clay.	34.1	1.2	0.1	
7	702	Layer		Natural	Mid orange brown silty clay. Frequent shale inclusions.	34.1	1.2	0.05+	
8	800	Layer		Made ground	Brick and stone hardcore.	88	3.24	0.5	Mod
8	801	Layer		Topsoil	Dark brownish grey clayey silt.	88	3.24	0.25	Mod
8	802	Layer		Buried topsoil	Dark brownish grey silty clay.Occasional CBM inclusions.	88	3.24	0.25	Mod
8	803	Layer		Subsoil	Mid brown silty clay. Frequent shale stone inclusions.	88	3.24	0.14	
8	804	Layer		Natural	Mid brown silty clay. Frequent shale stone inclusions.	88	3.24	0.10+	
9	900	Layer		Made ground	Crushed brick and concrete.	85	1.6	0.30+	Mod
10	1000	Layer		Made ground	Tarmac over concrete.	30	10	0.4	Mod
10	1001	Layer		Subsoil	Mid orange brown silty clay. Rare shale/mudstone inclusions.	30	10	0.2	
10	1002	Layer		Natural	Light brown and grey silty clay. Frequent shale/mudstone inclusions.	30	10	0.06+	
10	1003	Cut		Tree throw	D-shaped tree throw. Rounded sides and a flat base.	1.34	1.2	0.13	
10	1004	Fill	1003	Tree throw	Mid greyish brown silty clay. Frequent shale and mudstone inclusions.	1.34	1.2	0.13	
11	1100	Layer		Topsoil	Dark brownish grey clayey silt.	0.5	0.3	0.42	Mod
11	1101	Layer		Natural	Mid brown silty clay. Frequent shale inclusions.	0.5	0.3	0.42+	
12	1200	Layer		Topsoil	Dark brownish grey clayey silt.	0.5	0.4	0.4	Mod
12	1201	Layer		Natural	Mid brown silty clay. Frequent shale inclusions.	0.5	0.4	0.4+	
13	1300	Layer		Topsoil	Dark brownish grey clayey silt.	0.46	0.35	0.36	Mod
13	1301	Layer		Natural	Light brown silty clay. Frequent rounded shale inclusions.	0.46	0.35	0.36+	
14	1400	Layer		Topsoil	Dark brownish grey clayey silt.	0.4	0.34	0.36	Mod
14	1401	Layer		Subsoil	Mid brown silty clay. Common sub rounded shale and mudstone inclusions.	0.4	0.34	0.04	
14	1402	Layer		Natural	Light brown silty clay. Frequent shale and mudstone inclusions.	0.4	0.34	0.10+	

Trench No	Context	Туре	Fill of	Context Interpretation	Context Description	Length (m)	Width (m)	Depth/ thickness (m)	Spot- date
15	1501	Layer		Buried soil	Dark brown clayey silt. Modern inclusions (glass).	0.55	0.4	0.06+	Mod
16	1600	Layer		Topsoil	Dark grey silty clay. Rare CBM, slate and pebble inclusions.	4		0.49	Mod
16	1601	Layer		Subsoil	Mid greyish brown silty clay. Rare CBM slate and pebble inclusions.	4		0.23	Mod
16	1602	Layer		Natural	Mid brown silty clay.	4		0.09+	
17	1700	Layer		Topsoil	Mid brownish grey clayey silt. Rare stone inclusions.	21.43	2.19	0.3	
17	1701	Layer		Buried soil	Dark brownish grey clayey silty. Rare coal and charcoal inclusions.	21.43	2.19	0.27	Mod
17	1702	Layer		Subsoil	Light greyish brown silty clay. Rare stone inclusions.	21.43	2.19	0.25	
17	1703	Layer		Natural	Light brown and yellow clayey sand. Frequent stone inclusions.	21.43	2.19	0.30+	
18	1800	Layer		Topsoil	Dark brown clayey silt.	50.6	5.56	0.15	
18	1801	Layer		Subsoil	Light brown silty clay.	50.6	5.56	0.05	Mod
18	1802	Layer		Natural	Light greyish brown clayey sand. Frequent shale and mudstone inclusions.	50.6	5.56	0.05+	
18	1803	Cut		Ditch	Cut of linear ditch. NW-SE aligned. Straight sides and a flat base.	0.3	1.3	0.47	
18	1804	Fill		Ditch	Light brown silty clay. Rare shale and flint pebble inclusions.	0.3	1.3	0.47	
15	1501	Layer		Buried soil	Dark brown clayey silt. Modern inclusions (glass).	0.55	0.4	0.06+	

APPENDIX B: EVALUATION REPORT





Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

Archaeological Evaluation and Strip, Map & Record



for Lidl Great Britain Ltd

CA Project: 6791 CA Report: 6791_1

May 2019



Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

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SUMMARY

Project Name: Carmarthen Police Station

Location: Friars Park, Carmarthen, Carmarthenshire

NGR: 240831 219897

Type: Evaluation and Strip, Map & Record

Date: 8-12 April 2019

Planning Reference: W/37401

Location of Archive: To be deposited with the National Museum of Wales

Site Code: CARM19

An archaeological evaluation and Strip, Map & Record were undertaken by Cotswold Archaeology in April 2019 at Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire. Four trenches were excavated.

Possible evidence associated with the Civil War defences 'The Bulwarks' Scheduled Monument was noted in Trench 2 in the form of a deposit containing pottery of 16th or 17th century date, animal bone and a clay pipe fragment, potentially part of the monument make up, with another possible deposit identified in Trench 1. Trench 4 was a larger strip, map & record area alongside the defensive ditch of 'The Bulwarks' and a small number of undated features were identified, most notable of which were two parallel linears likely to pre-date the earthwork. There was no evidence of any additional defensive features external to the ditch in the form of a *glacis*, defensive pits or a wider counter scarp than previously identified, with the whole area showing evidence of having been disturbed and levelled in the modern period. Trench 3 demonstrated extensive evidence for modern disturbance of the monument in the latter part of the 20th century.

1. INTRODUCTION

- In April 2019 Cotswold Archaeology (CA) carried out an archaeological evaluation 1.1 and strip, map & record for Lidl Great Britain Ltd at Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire (centred at NGR: 240831 219897; Fig. 1). The evaluation was undertaken under a Class 7 consent issued by Cadw in response to a Scheduled Monument Consent (SMC) application for the demolition of existing buildings and the development of a Lidl store with associated parking, delivery arrangements and widening of current access road. The evaluation was carried out to confirm the presence or absence of archaeology in the affected areas of the site in order to inform Cadw's final decision on the full SMC application. As such the evaluation was under the auspices of a separate SMC process related to a planning application, not the planning application itself.
- 1.2 The evaluation was carried out in accordance with a brief for archaeological evaluation prepared by Will Davies, Regional Inspector of Ancient Monuments and Archaeology (North East Wales) for Cadw, the consenting authority for scheduled monuments. A subsequent detailed Written Scheme of Investigation (WSI) was produced by CA (2019) and approved by Will Davies. As the proposed works relating to the widening of the access road and car park construction would likely impact up on a Scheduled Ancient Monument, 'The Bulwarks' (Cadw ref. CM009), it was deemed necessary to undertake archaeological investigation. The fieldwork also followed Standard and guidance: Archaeological field evaluation (ClfA 2014). It was monitored by Will Davies and Louise Mees, including a site visit on 10 April 2019.

The site

1.3 The proposed development area is approximately 1.3ha, and comprises the buildings of a former police station and associated car parks and access roads adjacent to the earthworks of The Bulwarks Scheduled Monument. It is bounded to the west by Morfa Lane, to the south by the A4242, to the east by Friars Park and to the north by residential properties and further earthworks of The Bulwarks. The area evaluated covers approximately 440m², within the eastern area of the proposed development, and contains the bank and southern bastion remnant of the Scheduled Monument. Trenches were located adjacent to the existing access road to the police station and the area immediately in front of the defensive ditch. The site lies at approximately 17m AOD, but occupies a point of high ground, sloping suddenly downwards to the roads in the south and west.

1.4 The underlying bedrock geology of the area is mapped as Tetragraptus Beds – Mudstone, sedimentary bedrock formed approximately 466 to 478 million years ago in a local environment dominated be deep seas. Superficial deposits of Devensian Sand and Gravel are also recorded. These are glaciofluvial in origin, forming up to two million years ago in ice age conditions (BGS 2019). This is consistent with the geology encountered during the evaluation.

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site has previously been the subject of a Heritage Desk-Based Assessment (CA 2018). Reference should be made to this document for detailed background information; the below is a summary of the Assessment's findings.
- 2.2 Carmarthen was the *civitas* of the *Demetae* tribe known as *Moridinum* (meaning *sea fort*) during the Romano-British period. The initial fort is believed to date to about AD75, possibly replacing the Iron Age hillfort on Merlin's Hill *c*. 2km to the north-west of the site. By AD120 the civilian *vicus* had been established and a new fort built further to the south, by the river, on the location of the medieval castle *c*. 600m to the east of the site. Although no evidence has been recorded of extra-mural Romano-British settlement within the wider area of the town, the proposed development area may have been close to a conjectural Romano-British road, *c*. 170m to the north of the site (*ibid*.).
- 2.3 In the early medieval period the settlement was known as *Llanteulyddog* and its strategic importance was such that a castle was built in 1094. The castle was destroyed and rebuilt several times until 1223 when a town wall was constructed. During the 13th century Franciscan friars established themselves in the town and by 1284 had their own friary buildings on Lammas Street, 70m to the east of the site (*ibid.*).
- 2.4 In the post-medieval period Carmarthen's main income centred on agriculture and the wool trade, with mills and wool mills sited around the town (*ibid*.). During the Civil War the town was a Royalist stronghold, and the aging medieval fortifications were

strengthened around the town. This included within the western part of the town, around and within the now dissolved Franciscan friary; this resulted in the earthworks of The Bulwarks, which were constructed over parts of the friary grounds (*ibid*.). Archaeological excavations within the Friar's Park area, *c*. 60m to the east of the site, revealed several Civil War trenches and features cutting through the medieval remains of the Friary, and evidence of earlier medieval layers (James 1995; Manning 1998).

'The Bulwarks' Scheduled Monument (Cadw ref: CM009)

- 2.5 Cadw's Scheduled Monument description states that 'The monument comprises the remains of earthwork defences dating to the Civil War, 1642-51 and built to protect west Carmarthen then held for the Royalists. Further stretches existed originally but these have now been destroyed. The earthworks comprise the remains of low wide walls and associated ditches designed to absorb shot combined with bastions to protect the walls and for positioning artillery. A central section of bank survives to a height of *c*. 0.7m fronted to the west by a ditch *c*. 1.6m deep externally and 2.3m above the crest of the bank. North and south of this are two polygonal projecting bastions. Only the northern is well preserved, with the depth of the ditch being *c*. 2m below the exterior and 4m below the crest of the now slight bank' (Cadw 2018).
- 2.6 The Bulwarks are considered to be one of the best examples of Civil War earthern town defences that still remain in Britain. They would have originally formed part of a larger *enceinte*, enclosing the old medieval walls and suburbs of Carmarthen with lengths of bank and ditch, interspersed with regularly spaced bastions to provide platforms for artillery and flanking musketry. O'Neil references an additional section which survived in a field known as Parc y Bulwark but was demolished in the 1860's (O'Neil 1938), which suggests that at one time the defences did encircle the town.
- 2.7 It is likely The Bulwarks were constructed after the Royalists under Colonel Charles Gerard recaptured the town from Parliament in June 1644 where he is said to be 'fortifying it for the King'. It is likely that these defences replaced the earlier 'mud wall' which is noted as facing the Parliamentarians during their capture of the town in April 1644 under Colonel Laugharne (O'Neil 1938). James has thrown this assertion into question, suggesting that there is little documentary evidence of the 'mud wall' which pre-dates the arrival of Gerard, although he does concede that it is likely Laugharne faced some form of defence in early 1644 which supplemented the pre-existing medieval walls (James 1991). This is further reinforced by Laugharne

himself, who gave some impression of the size of the existing defences, stating that the perimeter required at least 1000 men to defend it (Osborne 2004). It is probable that Gerard, an experienced soldier, modified the existing defences into a more modern style learnt during his time in the Low Countries and that the monument which survives today is largely the result of his work (Harrington 1992, O'Neil 1938, James 1991). Evidence of an earlier phase of defensive work was identified during excavations at Friar's Park, immediately east of the monument, which James suggests is from a poorly planned and possibly unfinished earlier defensive system. Certainly the sheer scale of the ditches (4.4m deep and c. 6m wide) suggests a defensive function and the recovered dating evidence and stratigraphic relationship with earlier features suggests a mid-17th century date for construction. If this is the case, the layout of The Bulwarks does not appear to respect the earlier identified defences and as such likely represents a newly planned defensive system. Although it is possible older defences still remained extant as internal defensive points, with the evidence from the upper fills of the ditches identified at Friars Park, suggesting that in some cases they were not entirely backfilled until the 19th century (James 1991). Harrington suggests that it is likely the Friar's Park ditches were built as earlier defences in 1643 or as an internal, secondary line of defence to supplement The Bulwarks (Harrington 2004).

The Bulwarks monument mostly survives well, however the southern demi-bastion, which likely formed the south-western corner of the whole *enceinte*, has seen considerable modern disturbance, likely during the construction of the Police station. This has included the creation of an access through the monument immediately north of the demi-bastion and the general levelling and landscaping of the demi-bastion itself. The layout of the southern part of the monument is therefore considerably changed from that which was recorded during a survey in 1937 (O'Neil 1938).

3. AIMS AND OBJECTIVES

3.1 The objectives of the evaluation were to provide information about the archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation and quality, in accordance *Standard and guidance: Archaeological field evaluation* (ClfA 2014). This information will enable Cadw to identify and assess the particular significance of any heritage asset,

consider the impact of the proposed development upon it, and to avoid or minimise conflict between the heritage asset's conservation and any aspect of the development proposal, in line with the *National Planning Policy Framework* (DCLG 2012), in order to inform Cadw's final decision on the full SMC application

4. METHODOLOGY

- 4.1 The fieldwork comprised the excavation of four trenches in the locations shown on the attached plan (Fig. 2). The position of **Trench 1**, **2** and **3** was modified on site to take account of a buried service, with approval of Will Davies (Cadw) and **Trench 4** was located closer to the edge of the ditch than planned due to the presence of an existing metalled surface. Trenches were set out on OS National Grid (NGR) coordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4 *Survey Manual*.
- 4.2 All trenches were excavated by mechanical excavator equipped with a toothless grading bucket. All machine excavation was carefully undertaken under constant archaeological supervision to the top of the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*. All features were covered with terram prior to backfilling. Using a machine to excavate the trenches allows for the excavation of much larger areas, it produces neat, clear sections and surfaces with limited risk to the archaeology and is a standard approach on most archaeological sites.
- 4.3 Deposits were assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites.* No deposits were identified that required sampling. All artefacts recovered were processed in accordance with Technical Manual 3 *Treatment of Finds Immediately after Excavation.*
- 4.4 The archive and artefacts from the evaluation are currently held by CA at their offices in Andover. Subject to the agreement of the legal landowner the artefacts will be deposited with the Carmarthenshire County Museum, along with the site archive depending on whether . A summary of information from this project, set out within

Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain.

4.5 Copies of the <u>draft report</u> will be distributed to the Client or their Representative and to Cadw thereafter for verification and approval. Thereafter, copies of the <u>approved report</u> will be issued to the Client, Cadw, DAT Historic Environment Record (HER) and the National Monuments Record at Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) as per the *Guidelines for Digital Archaeological Archives* (RCAHMW, 2015). Reports will be issued in digital format (PDF/PDFA as appropriate) except where hard copies have been specifically requested, and will be supplied to the HER along with shapefiles containing location data for the areas investigated, as required by the Welsh HER guidelines (WAT 2018).

5. RESULTS (FIGS 2-9)

- 5.1 This section provides an overview of the fieldwork results; detailed summaries of the recorded contexts, finds and environmental evidence are to be found in Appendices A, B and C respectively.
- Trenches 1, 2 and 3 were located alongside the existing access into the site, which is due to be expanded as part of the proposed development. The trenches were positioned to investigate the potential impact of this proposal and assess the level of survival or previous disturbance within this part of the monument. Trench 4 was a strip, map & record area located immediately alongside the defensive ditch, in an area where the car park is proposed for expansion. As per the WSI (CA 2019), due to the relatively limited impact of the proposed car park expansion in the area of Trench 4, the trench was machined to formation level only and as such, did not reach the natural substrate in approximately two thirds of the trench.

Trench 1 (Figs 2 & 3)

Trench 1 consisted of dark greyish brown sandy silt topsoil 100 up to 0.28m thick. This sealed a layer of redeposited natural 101 up to 0.42m thick comprising a midbrownish grey sandy silt with very abundant angular mudstone fragments, possibly associated with the monument construction, although it contained no dateable

material. This overlay the natural substrate **102** of sub rounded mudstone gravel within a sandy silt matrix at a depth of 0.7m.

Trench 2 (Figs 2 & 4)

Trench 2 was only partially excavated to its maximum depth of 1.2m due to the presence of a modern ceramic drain which crossed the trench in a north-east/south-west alignment at an approximate depth of 0.6m. The natural substrate 202 was encountered in the northern end of the trench at a depth of 0.93m below present ground level. This was directly overlain by a deposit 201 of mid brownish grey clayey sand and angular mudstone fragments, which appeared to thicken towards the south. Finds recovered from 201 included animal bone, pottery of 16th or 17th century date, a clay pipe fragment and a post-medieval bone cutlery handle. This was in turn overlain by a dark greyish brown sandy silt subsoil 200.

Trench 3 (Figs 2 & 5)

Trench 3 contained no features of archaeological interest and consisted entirely of modern made ground 301 which contained large quantities of modern brick, tarmac, wood etc to a depth greater than 1.2m below present ground level. This was sealed below 0.28m of topsoil and turf 300.

Trench 4 (Figs 2, 6 to 9)

As outlined in the WSI (CA 2019) and above, **Trench 4** was machined to formation level only, averaging approximately 0.7m below present ground level. As such, the natural substrate was not consistently exposed along the length of the trench, with some remnants of subsoil **401** remaining (see Figure 4). The trench ran parallel to the earthwork bank and was located immediately to the east of the ditch. The trench was excavated in order to establish the presence or absence of archaeological features within the area of the proposed car park extension. Where exposed, the natural substrate **402** consisted of mid-reddish brown clayey silt with abundant subangular mudstone gravel. This was sealed below a mid-greyish brown clayey silt subsoil **401** which contained inclusions of modern coal, brick and gravel. This was in turn sealed below mid-brown sandy silt topsoil **400** which also contained abundant modern brick and coal fragments. The topsoil and subsoil depths were broadly

consistent throughout the trench and as a result only representative sections at the north-western and south-eastern ends were drawn.

- 5.7 Where **402** was consistently exposed in the south-eastern end of the trench, several features were identified. All were sealed below subsoil **401** and cut the natural **402**. Most notable were two parallel linears **403** and **415**.
- 5.8 Gully **403** was aligned north-east/south-west and measured 0.46m wide and 0.34m deep, with steep sides and a concave base. It contained a single fill **404**, which consisted of a mid-greyish brown silty clay from which a single iron nail and a roof slate with nail hole, were recovered.
- 5.9 Ditch **415** ran parallel to **403**, approximately 5m to the south-east and measured up to 1.33m wide and 0.51m deep. It had steeply sloping sides and a concave base and contained a single homogenous mid brown clayey silt fill **416**, from which no finds were recovered.
- 5.10 A further possible ditch terminal **411** and associated pit/posthole **409** were also recorded. The possible terminal was 1.5m wide and up to 0.26m deep, while the pit/posthole was 0.7m wide and 0.12m deep. There was no discernible relationship between the two as both were filled with the same homogenous mid greyish brown clayey silt fill **410** and **412**. The organic rich and topsoil-like nature of the fills, suggests a probable post-medieval or modern date.
- 5.11 Tree bowl **413** was the south-eastern most feature encountered and was subcircular in plan, measuring 0.94m in diameter and 0.14m deep. It contained a single fill **414** of mid greyish brown gravelly silt but no dateable material was recovered. Root disturbance was noted in this part of the trench and it may be that **413** was related to this as the nature of the fills was very similar.
- 5.12 Pit **405** was sub-oval in plan with very steep sides and an irregular base measuring 1.54m x 1.1m in plan and 0.43m deep. It contained three fills, the lower two of which **407** and **408** consisted of a dark blackish brown silt charcoal rich layer **407** and a mid-brown with reddish orange silty clay layer **408**, exhibiting evidence for having been subjected to heat. The presence of these fills, along with the general form of the feature and abundance of very large, still extant roots throughout, suggest **405** is probably the remnant of a tree bowl which has been burnt out in situ.

5.13 Pit **405**, post hole **409**, tree bowl **413** and ditch terminal **411** were all excavated and fully recorded on site. Photographs and drawings of these features can be found in the site archive but were not included in the report as they are considered to be later features.

6. THE FINDS

6.1 Artefactual material recovered from the evaluation is listed in Appendix B and discussed further below. All finds have been recorded directly to an MS Excel spreadsheet. Alphanumerical codes have been applied to pottery fabrics.

Pottery

6.2 A small assemblage, comprising three sherds of glazed earthenware, was recovered from two deposits. Topsoil layer **400** produced a single sherd (31g) of possible Donyatt ware, whilst monument construction deposit **201** produced a sherd of brownglazed earthenware and a slip-trail decorated flat-based dish or bowl sherd of possible local or Somerset production. The group is probable of 16th to 17th century date.

Other Finds

- 6.3 Two metal items, comprising one of iron (Ra. 2) and one composite item of iron and worked bone (Ra. 1), were recovered from two deposits. Ra. 1 is a cutlery handle formed from an iron blade fragment riveted between two worked bone plates. It is broadly dateable to the post-medieval period. Ra. 2 is of uncertain form, function and date.
- A single clay tobacco pipe fragment (3g), of stem only, was recovered from monument construction deposit 201. Without diagnostic features such as decoration or bowl, the fragment can only be broadly dated from the late 16th to late 19th centuries.
- A slate peg roof tile of pre-19th century date (CADW 2019) was recovered from gully 403 (fill 404).
- 6.6 Three fragments of highly fired clay were recovered from monument construction deposit 201, featuring a flat base and broadly rounded upper surface. The almost vitrified nature of the clay is suggestive of use in a hearth base or similar.

7. THE BIOLOGICAL EVIDENCE

Animal Bone

7.1 Four fragments of animal bone (368g) were recovered from construction deposit 201 and layer 300. Artefactual material dating respectively to the post-medieval period and the modern era was also recovered (See Table 1, Appendix C). Each fragment was identified as cattle bone (*Bos taurus*) and displayed either cut marks or impact damage that indicates an origin in butchery waste

8. DISCUSSION

- 8.1 The fieldwork identified a number of archaeological features, although they largely remain undated.
- 8.2 The evidence most likely to be directly associated with the Scheduled Monument and the Civil War period is the deposit 201 encountered within Trench 2 and possibly the redeposited natural deposit 101 within Trench 1. Both may relate in some form to the original construction of the monument. Deposit 201 appeared to be thickening towards the south, possibly even being cut into the natural substrate 202 and it seems highly likely that this is associated with the construction of the monument in 1644. Based on the 1937 survey, it could potentially be argued that this deposit represents an upper fill of one of the demi-bastion ditches where it adjoins the longer stretch of ditch, however within the narrow confines of the trench it is impossible to argue this beyond conjecture, particularly now that the topography of this part of the site is much changed.
- 8.3 The presence of large deposits of modern made ground within Trench 3 suggests that this part of the monument has seen extensive modification and landscaping, probably associated with the construction of the police station, potentially representing an easy way, at the time, to dispose of construction related spoil. However, the absence of evidence in this trench does not preclude the possibility that archaeological remains may survive at a greater depth than was possible to safely reach within the confines of Trench 3. Any archaeological remains that do survive below this depth will not be impacted by the development and will be preserved insitu.
- 8.4 Despite being positioned on the outer lip of the defensive ditch, Trench 4 did not identify any evidence directly associated with the monument. There was no evidence that the edge of the counter-scarp existed any further to the west than it does presently and no evidence for any external defensive features such as a glacis, pitfalls or chevaux de frise (Harrington 2003). Based on the abundant presence of modern material within the topsoil and subsoil, it seems likely that this part of the monument has also been exposed to a certain degree of disturbance, levelling and landscaping, presumably also associated with the Police station and car park construction which may have occurred prior to the Scheduling in 1982.

- 8.5 Whilst uncertain in date, ditch 415 and gully 403 can at least be argued to likely date prior to the construction of the monument as they appear to be heading directly into the defensive ditch. The presence of the Friary excavated immediately east of the site, lends weight to the suggestion that these are potentially of medieval date and representing minor boundaries or enclosures in its immediate hinterland, although without firm dating evidence this remains conjectural.
- 8.6 The remaining features 405, 409, 411 and 413 are likely to be of natural or relatively modern origin and therefore of little archaeological value.

9. CA PROJECT TEAM

Fieldwork was undertaken by Sam Wilson, assisted by Majbritt Bengtson and Katherine Hebbard. The report was written by Sam Wilson. The finds and biological evidence reports were written by Katie Marsden and Andy Clarke respectively. The illustrations were prepared by Eleanor Cox. The archive has been compiled by Sam Wilson, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Oliver Good.

10. REFERENCES

- British Geological Survey (BGS), 2019, Geology of Britain Viewer

 http://maps.bgs.ac.uk/geology_viewer_google/googleviewer.html Accessed 15 April 2019
- CADW, 2019, 'Natural Slate'

 https://cadw.gov.wales/docs/cadw/publications/Maintenance_Matters_Natural_Slate_EN.pdf Accessed 25 April 2019
- Cotswold Archaeology (CA), 2018, Former Police Station, Carmarthen, Carmarthenshire:

 Heritage Assessment, CA Report No. **18170**
- Cotswold Archaeology (CA), 2019, Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire: Written Scheme of Investigation for an Archaeological Evaluation
- Department of Communities and Local Government (DCLG) 2012 National Planning Policy
 Framework
- Harrington, P. 1992, Archaeology of the English Civil War, Shire Publications Ltd
- Harrington, P. 2003, English Civil War Fortifications 1642-51, Osprey
- Harrington, P. 2004, English Civil War Archaeology, B T Batsford
- James, T. 1991, 'Carmarthen's Civil War Defences. Discoveries at Carmarthen Greyfriars

 Excavations 1983-1990' in *The Carmarthenshire Antiquary XXVII*, The

 Carmarthenshire Antiquarian Society
- James, T. 1995, Excavations at Carmarthen Greyfriars 1983-1990
- Manning, A. 1998, Carmarthen Greyfriars, Carmarthen: the 1997 rescue excavations and watching brief on the site of the choir and area north of the friary, Cambria Archaeology

Osborne, M. 2004, Sieges and Fortifications of the Civil Wars in Britain, Partizan Press

Welsh Archaeological Trust (WAT), 2018, Guidance for the Submission of Data to the Welsh Historic Environment Records (HERs)

APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Туре	Fill of	Context interpretation	Description	L (m)	W (m)	D (m)	Spot-date
1	100	Layer		Turf/topsoil	Dark greyish brown sandy silt with sub-angular mudstone shale	5.5	1.9	0-0.28	
1	101	Layer		Redeposited natural?	Mid brownish grey sandy silt with v. abundant mudstone shale	5.5	1.9	0.28-0.7	Civil War?
1	102	Layer		Natural	Angular and sub-rounded mudstone shale gravel in sandy silt matrix	5.5	1.9	0.7-0.9+	
2	200	Layer		Turf/topsoil	Dark greyish brown sandy wilt with sub-angular mudstone shale and CBM frags	4.9	1.9	0-0.53	
2	201	Deposit		Monument construction	Mid brownish grey clayey sand with angular and sub-rounded mudstone shale	4.9	1.9	0.53-0.93	Civil War
2	202	Layer		Natural	Angular and sub rounded mudstone shale gravel in sandy silt matrix	4.9	1.9	0.93-1.2+	
3	300	Layer		Turf/topsoil	Dark greyish brown sandy silt with sub-angular mudstone shale	5.1	1.9	0-0.28	
3	301	Layer		Made ground	Mid grey sandy silt with angular mudstone shale gravel and CBM, concrete, tarmac, etc	5.1	1.9	0.28-1.2+	Modern
4	400	Layer		Turf/topsoil	Mid brown sandy silt with sub- angular mudstone shale, modern coal and CBM frags	67.1	5.1	0-0.17	
4	401	Layer		Subsoil	Mid greyish brown clayey silt with sub-angular mudstone shale, modern coal and brick frags	67.1	5.1	0.17-0.41	
4	402	Layer		Natural	Mid reddish brown clayey silt with angular mudstone shale gravel	67.1	5.1	0.41-0.69+	
4	403	Cut		Gully	Linear in plan with steep sides and concave base	5.1	0.46	0.34	Medieval?
4	404	Fill	403	Single fill of gully	Mid greyish brown silty clay	5.1	0.46	0.34	Medieval?
4	405	Cut		Tree bowl?	Sub-oval in plan with very steep sides and irregular base	1.54	1.1	0.43	Undated
4	406	Fill	405	Tree bowl?	Mid brown clayey silt with occasional charcoal frags	1.54	1.1	0.28	Undated
4	407	Fill	405	Tree bowl?	Dark blackish brown charcoal rich silt	>0.87	>0.38	0.03	Undated
4	408	Fill	405	Tree bowl?	Mid brown silty clay with reddish orange patches with charcoal flecks	>0.83	>0.35	0.11	Undated
4	409	Cut		Posthole/pit	Sub-circular in plan with gently sloping sides and concave base	0.82	0.7	0.12	Post- medieval/ Modern?
4	410	Fill	409	Posthole/pit	Mid greyish brown clayey silt	0.82	0.7	0.12	Post- medieval/ Modern?
4	411	Cut		Possible ditch terminal	Linear in plan with moderately sloping sides and concave base	>2	1.5	0.26	Post- medieval/ Modern?
4	412	Fill	411	Possible ditch terminal	Mid greyish brown clayey silt	>2	1.5	0.26	Post- medieval/ Modern?
4	413	Cut		Posthole/pit	Sub-circular in plan with gently sloping sides and concave base	0.94	0.94	0.14	Undated
4	414	Fill	413	Posthole/pit	Mid greyish brown gravelly silt	0.94	0.94	0.14	Undated
4	415	Cut		Ditch	Linear in plan with steeply sloping sides and concave base	5.1	1.33	0.51	Medieval?
4	416	Fill	415	Single fill of ditch	Mid brown clayey silt	5.1	1.33	0.51	Medieval?

APPENDIX B: THE FINDS

Context	Class	Ra No.	Description	Fabric Code	Ct.	Wt.(g)	Spot- date
201	post-medieval pottery		Slip-trail decorated bowl/dish	ST EW	1	51	C16-C17
	post-medieval pottery		Brown-glazed earthenware	BG EW	1	4	
	clay tobacco pipe		Stem		1	3	
	fired clay		hearth base		3	137	
	worked bone and iron	1	cutlery handle		1	20	
400	post-medieval pottery		Donyatt?	DONY	1	31	C16-C17
404	iron	2	uncertain object		1	18	
	worked stone		slate peg tile		2	274	

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

Table 1: Identified animal species by fragment count (NISP) and weight and context.

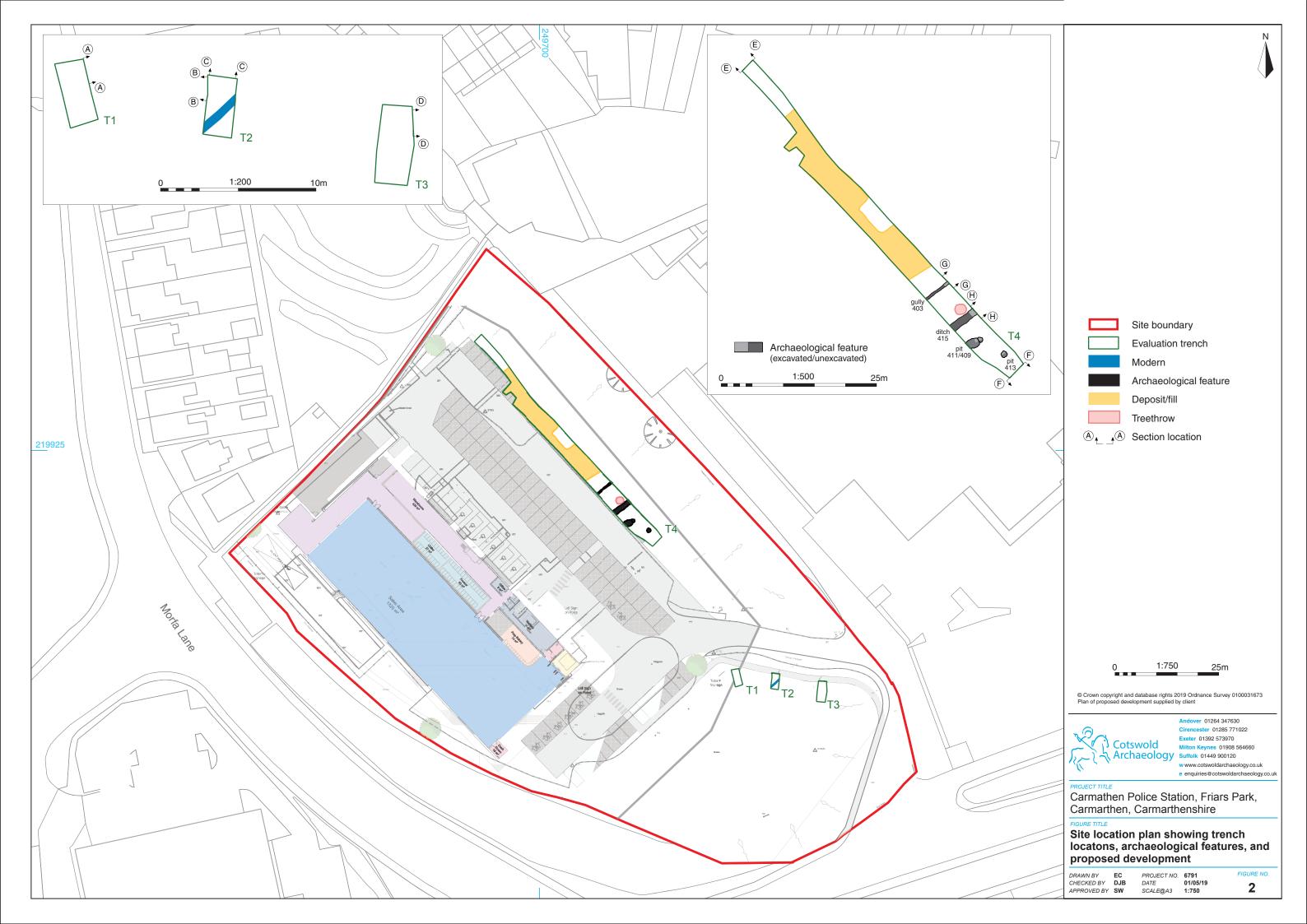
Context	BOS	То	otal	Weight (g)	
Post-medieval					
201		3	3	307	
Modern					
300		1	1	61	
Total		4	4		
Weight		368	368		

BOS = cattle

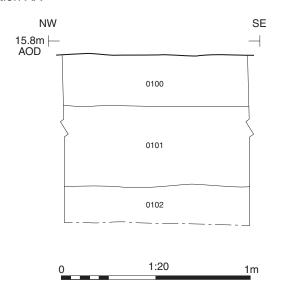
APPENDIX D: OASIS REPORT FORM

Project Name	Carmarthen Police Station, Friars Park, Carmarthe					
Short description	Carmarthenshire An archaeological evaluation and Strip, Map & Record was undertaken by Cotswold Archaeology in April 2019 at Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire. Four trenches were excavated.					
	Possible evidence associated with the Civil War defences 'T Bulwarks' Scheduled Monument was noted in Trench 2 in the for of a deposit containing pottery of 16th or 17th century date a animal bone, potentially part of the monument make up, where another possible deposit identified in Trench 1. Trench 4 was larger strip, map & record area alongside the defensive ditch 'The Bulwarks' and a small number of undated features were identified, most notable of which were two parallel linears likely pre-date the earthwork. There was no evidence of any additional defensive features external to the ditch in the form of a glad defensive pits or a wider counter scarp than previously identified with the whole area showing evidence of having been disturbed and levelled in the modern period. Trench 3 demonstrate extensive evidence for modern disturbance of the monument in the latter part of the 20th century.					
Project dates	8-12 April 2019					
Project type	Evaluation/Strip, Map & Record					
Previous work	Desk Based Assessment (Cotswold Archaeology 2018)					
Future work	Unknown					
PROJECT LOCATION						
Site Location	Carmarthen Police Station, Friars Park, Carmarthe Carmarthenshire					
Study area (M²/ha)	1.3ha					
Site co-ordinates	240831 219897					
PROJECT CREATORS						
Name of organisation	Cotswold Archaeology					
Project Brief originator	Cadw					
Project Design (WSI) originator	Cotswold Archaeology (2019)					
Project Manager	Olly Good					
Project Supervisor	Sam Wilson					
MONUMENT TYPE	Scheduled Monument 'The Bulwarks' Cadw ref CM009					
SIGNIFICANT FINDS	None					
PROJECT ARCHIVES	Intended final location of archive Content (e.g. potter (museum/Accession no.)					
Physical	National Museum of Wales Ceramics, animal bounded metal objects, clay pip					
Paper	National Museum of Wales Context sheets, trensheets, drawing registers					
Digital	National Museum of Wales Digital photos					
BIBLIOGRAPHY	<u> </u>					





Section AA





Representative section of Trench 1, looking north-east (1m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Milton Keynes 01908 564660

Suffolk 01449 900120 w www.cotswoldarchaeology.co.uk

e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire

FIGURE TITLE

Trench 1: representative section and photograph

DRAWN BY GB
CHECKED BY DJB
APPROVED BY SW

 PROJECT NO.
 6791

 DATE
 29/04/2019

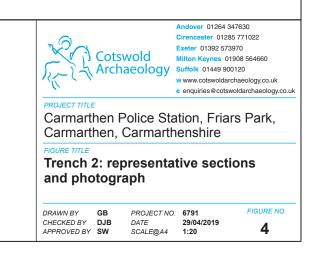
 SCALE@A4
 1:20

FIGURE NO.

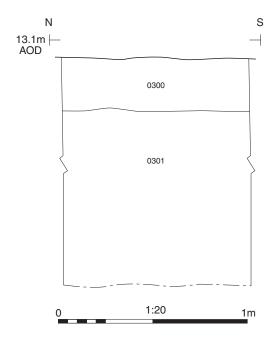
Section BB Section CC SW NE NW SE 15.7m AOD 0200 0200 0200 0202 0 1:20 1m 0 1:20 1m



Representative section of Trench 2 showing possible Civil War related deposit, looking south-west (1m scale)



Section DD





Representative section of Trench 3, looking south-east (1m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Milton Keynes 01908 56466

Milton Keynes 01908 564660 Suffolk 01449 900120

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire

FIGURE TITLE

Trench 3: representative section and photograph

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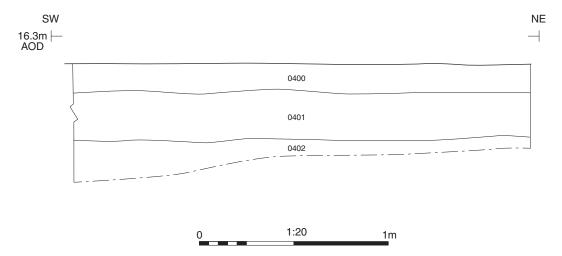
 PROJECT NO.
 6791

 DATE
 29/04/2019

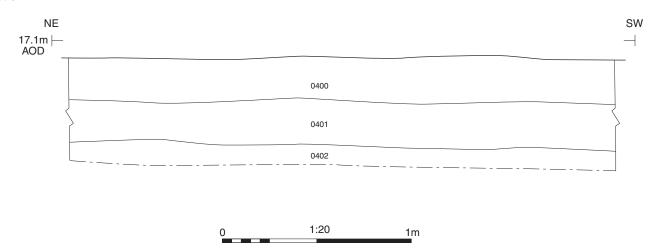
 SCALE@A4
 1:20

FIGURE NO.

Section EE



Section FF





Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970

Milton Keynes 01908 564660 Suffolk 01449 900120

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire

FIGURE TITLE

Trench 4: representative sections

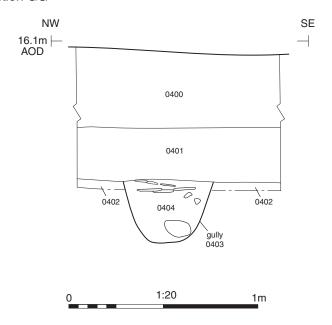
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CHECKED BY DJB
APPROVED BY OG

PROJECT NO. 6791
DATE 16/05/2019
SCALE@A4 1:20

FIGURE NO.



Section GG





Section of gully 403, looking north-east (1m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970

Milton Keynes 01908 564660 Suffolk 01449 900120

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire

FIGURE TITLE

Section and photograph of archaeological features

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CHECKED BY DJB
APPROVED BY SW

 PROJECT NO.
 6791

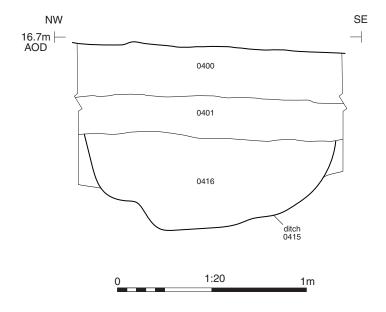
 DATE
 29/04/2019

 SCALE@A4
 1:20

FIGURE NO.

7

Section HH





Section of ditch 415, looking north-east (1m scale)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Milton Keynes 01908 564660 Suffolk 01449 900120

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire

FIGURE TITLE

Section and photograph of archaeological features

DRAWN BY GB
CHECKED BY DJB
APPROVED BY SW

 PROJECT NO.
 6791

 DATE
 29/04/2019

 SCALE@A4
 1:20

FIGURE NO.



Trench 4 post-excavation showing subsoil 401 still present at formation level, looking south-east (1m scales)



General view of features in Trench 4, looking south-east (1m scales)



Trench 4, features covered with terram prior to backfilling



Trench 4 post-excavation, looking north-west (1m scales)



Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire

Trench 4: photographs

 DRAWN BY
 EC/AW
 PROJECT NO.
 6791

 CHECKED BY
 DJB
 DATE
 01/05/19

 APPROVED BY
 SW
 SCALE@A3
 NA



Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 1, Clyst Units Cofton Road Marsh Barton Exeter EX2 8QW

t: 01392 573970

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive, Stonebridge Milton Keynes Buckinghamshire MK13 0AT

t: 01908 564660

Suffolk Office

Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ

t: 01449 900120

e: enquiries@cotswoldarchaeology.co.uk



APPENDIX C: WRITTEN SCHEME OF INVESTIGATIONS





Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

Written Scheme of Investigation for an Archaeological Watching Brief during the removal of unauthorised construction elements



tor Lidl Great Britain Ltd

CA Project: CR0105

August 2019



Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

Written Scheme of Investigation for an Archaeological Watching Brief during the removal of unauthorised construction elements

CA Project: CR0105















DOCUMENT CONTROL GRID							
REVISION	DATE	Author	CHECKED BY	STATUS	REASONS FOR REVISION	APPROVED BY	
А	06.08.19	OLIVER GOOD	RAY KENNEDY	INTERNAL REVIEW	GENERAL EDIT	DUNCAN COE	

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construction.

1. INTRODUCTION

- 1.1 This document sets out details of a Written Scheme of Investigation (WSI) by Cotswold Archaeology (CA) for an archaeological watching brief at Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire centred on National Grid Reference (NGR) 240831 219897 at the request of Lidl Great Britain Ltd.
- 1.2 Planning permission (ref: W/37401) for the demolition of existing buildings and the development of a Lidl store with associated parking, delivery arrangements and widening of current access road was granted by Carmarthenshire County Council (CCC). The works are conditional on a Scheduled Monument Consent (SMC), which stipulated the necessity of a programme of an Archaeological Watching Brief during groundwork relating to the widening of the access road, service trenching, and development construction may potentially impact upon the Scheduled Monument, 'The Bulwarks' (Cadw ref. CM009). A WSI (CA, 2019b) has been produced by CA and approved by Cadw that covers this work.
- 1.3 During the onsite pre-commencement meeting on Friday the 2 August 2019 for the above works, Louise Mees, Regional Inspector of Ancient Monuments and Archaeology (RIAMA) (South West Wales) for Cadw queried the location of the fencing around the schedule area in the south of the site, and the location of a concreted fence post, and H&S safety board. Louise instructed CA to geo-reference the locations of these in relation to the agreed plan of the scheduled area. CA was able to confirm that these items, as well as several other items including a partly built footpath, lay within the scheduled area.
- 1.4 Cadw subsequently issued a stop order on all works in the scheduled area, stating that all unauthorised objects must be removed and the scheduled monument returned to its original condition under a new SMC. The new SMC requires the client to submit an approved methodology for the works, and a new WSI for an archaeological watching brief to monitor these works.
- 1.5 This WSI has been guided in its composition by Standard and guidance: Archaeological watching brief (ClfA 2014) and the information gathered during the previous investigations. All archaeological mitigation undertaken will adhere to planning policy in Wales, including Planning Policy Wales, Edition 10 2018 and Technical Advice Note 24: The Historic Environment 2017.

The site

- 1.6 The proposed development area is approximately 1.3ha and comprises the buildings of a former police station and associated car parks and access roads adjacent to the earthworks of The Bulwarks Scheduled Monument. It is bounded to the west by Morfa Lane, to the south by the A4242, to the east by Friars Park and to the north by residential properties and further earthworks of The Bulwarks. Within the eastern area of the proposed development is the Scheduled Monument which protects the remains of the bank and southern bastion of The Bulwarks. The site lies at approximately 17m above Ordnance Datum (aOD), but occupies a point of high ground, sloping suddenly downwards to the roads in the south and west.
- 1.5 The underlying bedrock geology of the area is mapped as Tetragraptus Beds Mudstone, sedimentary bedrock formed approximately 466 to 478 million years ago in a local environment dominated be deep seas. Superficial deposits of Devensian Sand and Gravel are also recorded. These are glaciofluvial in origin, forming up to two million years ago in ice age conditions (BGS 2019). This is consistent with the geology encountered during the evaluation (CA 2019).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site has previously been the subject of a Heritage Desk-Based Assessment (CA 2018). Reference should be made to this document for detailed background information; the below is a summary of the Assessment's findings.
- 2.2 Carmarthen was the *civitas* of the *Demetae* tribe known as *Moridinum* (meaning *sea fort*) during the Romano-British period. The initial fort is believed to date to about AD75, possibly replacing the Iron Age hillfort on Merlin's Hill *c.* 2km to the north-west of the site. By AD120 the civilian *vicus* had been established and a new fort built further to the south, by the river, on the location of the medieval castle *c.* 600m to the east of the site. Although no evidence has been recorded of extra-mural Romano-British settlement within the wider area of the town, the proposed development area may have been close to a conjectured Romano-British road, *c.* 170m to the north of the site (*ibid.*).
- 2.3 In the early medieval period the settlement was known as Llanteulyddog and its strategic importance was such that a castle was built in 1094. The castle was destroyed and rebuilt several times until 1223 when a town wall was constructed. During the 13th century Franciscan friars established themselves in the town and by

1284 had their own friary buildings on Lammas Street, 70m to the east of the site (*ibid*.).

In the post-medieval period Carmarthen's main income centred on agriculture and the wool trade, with mills and wool mills sited around the town (*ibid.*). During the Civil War the town was a Royalist stronghold, and the aging medieval fortifications were strengthened around the town. This included the western part of the town, around and within the now dissolved Franciscan friary; this resulted in the earthworks of The Bulwarks, which were constructed over parts of the friary grounds (*ibid.*). Archaeological excavations within the Friar's Park area, *c.* 60m to the east of the site, revealed several Civil War trenches and features cutting through the medieval remains of the Friary, and evidence of earlier medieval layers (James 1995; Manning 1998).

'The Bulwarks' Scheduled Monument (Cadw ref: CM009)

- 2.5 Cadw's Scheduled Monument description states that 'The monument comprises the remains of earthwork defences dating to the Civil War, 1642-51 and built to protect west Carmarthen then held for the Royalists. Further stretches existed originally but these have now been destroyed. The earthworks comprise the remains of low wide walls and associated ditches designed to absorb shot combined with bastions to protect the walls and for positioning artillery. A central section of bank survives to a height of c. 0.7m fronted to the west by a ditch c. 1.6m deep externally and 2.3m above the crest of the bank. North and south of this are two polygonal projecting bastions. Only the northern is well preserved, with the depth of the ditch being c. 2m below the exterior and 4m below the crest of the now slight bank' (Cadw 2018).
- 2.6 The Bulwarks are considered to be one of the best examples of Civil War earthern town defences that still remain in Britain. They would have originally formed part of a larger *enceinte*, enclosing the old medieval walls and suburbs of Carmarthen with lengths of bank and ditch, interspersed with regularly spaced bastions to provide platforms for artillery and flanking musketry. O'Neil references an additional section which survived in a field known as Parc y Bulwark but was demolished in the 1860's (O'Neil 1938), which suggests that at one time the defences did encircle the town.
- 2.7 It is likely The Bulwarks were constructed after the Royalists under Colonel Charles Gerard recaptured the town from Parliament in June 1644 where he is said to be 'fortifying it for the King'. It is likely that these defences replaced the earlier 'mud wall' which is noted as facing the Parliamentarians during their capture of the town in

April 1644 under Colonel Laugharne (O'Neil 1938). James has thrown this assertion into question, suggesting that there is little documentary evidence of the 'mud wall' which pre-dates the arrival of Gerard, although he does concede that it is likely Laugharne faced some form of defence in early 1644 which supplemented the preexisting medieval walls (James 1991). This is further reinforced by Laugharne himself, who gave some impression of the size of the existing defences, stating that the perimeter required at least 1000 men to defend it (Osborne 2004). It is probable that Gerard, an experienced soldier, modified the existing defences into a more modern style learnt during his time in the Low Countries and that the monument which survives today is largely the result of his work (Harrington 1992, O'Neil 1938, James 1991). Evidence of an earlier phase of defensive work was identified during excavations at Friar's Park, immediately east of the monument, which James suggests is from a poorly planned and possibly unfinished earlier defensive system. Certainly the sheer scale of the ditches (4.4m deep and c. 6m wide) suggests a defensive function and the recovered dating evidence and stratigraphic relationship with earlier features suggests a mid-17th century date for construction. If this is the case, the layout of The Bulwarks does not appear to respect the earlier identified defences and as such likely represents a newly planned defensive system. Although it is possible older defences still remained extant as internal defensive points, with the evidence from the upper fills of the ditches identified at Friars Park, suggesting that in some cases they were not entirely backfilled until the 19th century (James 1991). Harrington suggests that it is likely the Friar's Park ditches were built as earlier defences in 1643 or as an internal, secondary line of defence to supplement The Bulwarks (Harrington 2004).

2.8 The Bulwarks monument mostly survives well, however the southern demi-bastion, which likely formed the south-western corner of the whole *enceinte*, has seen considerable modern disturbance, likely during the construction of the Police station. This has included the creation of an access through the monument immediately north of the demi-bastion and the general levelling and landscaping of the demi-bastion itself. The layout of the southern part of the monument is therefore considerably changed from that which was recorded during a survey in 1937 (O'Neil 1938).

Evaluation (CA 2019), (Fig. 1)

2.9 Four trenches were dug in April 2019 and possible evidence associated with the Civil War defences, 'The Bulwarks' Scheduled Monument, was noted in Trench 2 in

the form of a deposit containing pottery of 16th or 17th century date, animal bone and a clay pipe fragment, potentially part of the monument make up, with another possible deposit identified in Trench 1. Trench 4 was a larger strip, map & record area alongside the defensive ditch of 'The Bulwarks' and a small number of undated features were identified, most notable of which were two parallel linears likely to predate the earthwork. There was no evidence of any additional defensive features than previously identified, with the whole area showing evidence of having been disturbed and levelled in the modern period.

3. AIMS AND OBJECTIVES

- 3.1 The objectives of the archaeological works are:
 - to monitor groundworks involved in the removal of unauthorised objects and structures from within the scheduled monument, and to identify, investigate and record all significant buried archaeological deposits, in particular any Civil War Deposits, revealed by these groundworks.
 - 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.
- 3.2 If significant archaeological remains are identified, reference will be made to the appropriate research framework, at https://www.archaeoleg.org.uk/intro.html so that the remains can, if possible, be placed within their local and regional context.

4. METHODOLOGY

Excavation and recording

- 4.1 The watching brief comprises of the observation by a competent archaeologist of all groundworks within the scheduled monument, and to insure that the agreed methodology is adhered to. Non-archaeologically significant deposits will be removed by the contractors under archaeological supervision. Where mechanical excavators are used, these will be equipped with a **toothless bucket**.
- 4.2 In the event that Civil War period or any other potentially significant archaeological deposits or remains (ascertained by a competent archaeologist) are identified, work will cease and Lidl Great Britain Ltd and the Cadw inspectorate will be contacted

immediately. An inspector will attend site and agree on a methodology for the excavation and recording of these deposits, or their preservation *in situ*. The exact approach i.e. machine for large deposits or by hand for smaller features can be established verbally on site and confirmed in writing by email.

- 4.3 If archaeological deposits are encountered they will be planned and recorded in accordance with Technical Manual 1 Fieldwork Recording Manual. Each context will be recorded on a pro-forma context sheet by written and measured description; principal deposits will be recorded by drawn plans (scale 1:20 or 1:50, or electronically using Leica GPS as appropriate) and drawn sections (scale 1:10 or 1:20 as appropriate). All vertical sections will be drawn and photographed. Should detailed feature planning be undertaken using GPS this will be carried out in accordance with Technical Manual 4 Survey Manual. Photographs (digital colour) will be taken as appropriate. All finds and samples will be bagged separately and related to the context record. All artefacts will be recovered and retained for processing and analysis in accordance with Technical Manual 3 Treatment of Finds Immediately after Excavation.
- 4.4 In the event of archaeological deposits being found for which the resources allocated are not sufficient to support treatment to a satisfactory and proper standard or which are of sufficient significance to merit an alternative approach such as contingency excavation or physical preservation, Lidl Great Britain Ltd and Cadw will be contacted immediately. Ground works in that area will cease until agreement has been reached on an appropriate archaeological response.

Artefact retention and discard

4.5 Artefacts from topsoil and subsoil and un-stratified contexts will normally be noted but not retained unless they are of intrinsic interest (e.g. worked flint or flint debitage, featured pottery sherds, and other potential 'registered artefacts'). All artefacts will be collected from stratified excavated contexts except for large assemblages of modern material. Such material may be noted and not retained, or, if appropriate, a representative sample may be collected and retained.

Human remains

4.6 In the case of the discovery of human remains (skeletal or cremated), at all times they should be treated with due decency and respect. Where human remains are encountered, these will not be excavated unless their disturbance by the development is unavoidable. In cases where exhumation of human remains is

deemed unavoidable/necessary, this will be conducted following the provisions of the Coroners Unit in the Ministry of Justice. All excavation and post-excavation processes will be in accordance with the standards set out in *ClfA Technical Paper No 7 Guidelines to the Standards for recording Human Remains* (ClfA 2004).

Environmental remains

- 4.7 Due care will be taken to identify deposits which may have environmental potential, and where appropriate, a programme of environmental sampling will be initiated. This will follow the Historic England environmental sampling guidelines outlined in Environmental Archaeology, A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (English Heritage 2011), and CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites. The sampling strategy will be adapted for the specific circumstances of the site, in close consultation with the CA Environmental Officer.
- 4.8 The processing of the samples will be done in conjunction with the relevant specialist following the Historic England general environmental processing guidelines (English Heritage 2011). Flotation or wet sieve samples will be processed to 0.25mm. Other more specialist samples such as those for pollen will be prepared by the relevant specialist. Further details of the general sampling policy and the methods of taking and processing specific sample types are contained within CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites.

Treasure

4.9 Upon discovery of Treasure CA will notify the client and the curator immediately. CA will comply fully with the provisions of the Treasure Act 1996 and the Code of Practice referred to therein. Findings will be reported to the coroner within 14 days.

5. STAFF AND TIMETABLE

- 5.1 This project will be under the management of Oliver Good MClfA, Project Manager, CA.
- 5.2 The staffing structure will be organised thus: the Project Manager will direct the overall conduct of the watching brief as required during the period of fieldwork. Day to day

responsibility however will rest with the Project Leader who will be on-site throughout the project.

- 5.3 The field team will consist of a Project Leader, supplemented by additional Archaeologists as required.
- 5.4 The duration of the fieldwork will be dependent upon the contractor's programme.
- 5.5 Specialists who will be invited to advise and report on specific aspects of the project as necessary are:

Ceramics Ed McSloy MCIfA (CA)
Metalwork Ed McSloy MCIfA (CA)

Flint Jacky Sommerville PCIfA (CA)

Animal Bone Andy Clarke (CA)/

Matty Holmes BSc MSc ACIfA (freelance)

Human Bone Sharon Clough MCIfA (CA)
Environmental Remains Sarah Wyles PCIfA (CA)

Conservation Pieta Greeves BSc MSc ACR

(Drakon Heritage and Conservation)

Geoarchaeology Dr Keith Wilkinson (ARCA)

Building Recording Peter Davenport MCIfA, FSA (CA)

5.6 Depending upon the nature of the deposits and artefacts encountered it may be necessary to consult other specialists not listed here. A full list of specialists currently used by Cotswold Archaeology is contained within Appendix A.

6. POST-EXCAVATION, ARCHIVING AND REPORTING

- 6.1 Following completion of fieldwork, all artefacts and environmental samples will be processed, assessed, conserved and packaged in accordance with CA Technical Manuals and Carmarthenshire County Museum/Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) guidelines. A recommendation will be made regarding material deemed suitable for disposal/dispersal in line with the relevant recipient Museums' collection policy.
- 6.2 An illustrated report will be compiled on the results of the fieldwork and assessment of the artefacts, palaeoenvironmental samples etc. The report will include:

- (i) an abstract containing the essential elements of the results preceding the main body of the report, and a summary of the project's background;
- (ii) description and illustration of the site location;
- (iii) a methodology of the works undertaken;
- (iv) integration of, or cross-reference to, appropriate cartographic and documentary evidence and the results of other research undertaken, where relevant to the interpretation of the watching brief results;
- (v) a description of the project's results;
- (vi) an interpretation of the results in the appropriate context;
- (vii) a summary of the contents of the project archive and its location (including summary catalogues of finds and samples);
- (viii) a site location plan at an appropriate scale on an Ordnance Survey, or equivalent, base-map;
- (ix) a plan showing the location of the areas observed and exposed archaeological features and deposits in relation to the site boundaries;
- (x) plans of each area in which archaeological features are recognised. These will be at an appropriate scale to allow the nature of the features exposed to be shown and understood. Plans will show the orientation of features recorded in relation to north. Section drawing locations will be shown on these plans. Archaeologically sterile areas will not be illustrated unless this can provide information on the development of the site stratigraphy or show palaeoenvironmental deposits that have influenced the site stratigraphy;
- (xi) section drawings of areas/trenches and features will be included where appropriate, with OD heights and at scales appropriate to the stratigraphic detail being represented. These will show the orientation of the drawing in relation to north/south/east/west. Archaeologically sterile trenches will not be illustrated unless they provide significant information on the development of the site stratigraphy or show palaeoenvironmental deposits that have influenced the site stratigraphy;
- (xiii) photographs showing significant features and deposits that are referred to in the text. All photographs will contain appropriate scales, the size of which will be noted in the illustration's caption;
- (xiv) a consideration of evidence within its wider local/regional context;
- (xv) a summary table and descriptive text showing the features, classes and numbers of artefacts recovered and soil profiles with interpretation;
- (xvi) specialist assessment or analysis reports where undertaken;

- 6.3 Specialist artefact and palaeoenvironmental assessment will take into account the wider local/regional context of the archaeology and will include:
 - (i) specialist aims and objectives
 - (ii) processing methodologies (where relevant)
 - (iii) any known biases in recovery, or problems of contamination/residuality
 - (iv) quantity of material; types of material present; distribution of material
 - (v) for environmental material, a statement on abundance, diversity and preservation
 - (vi) summary and discussion of the results to include significance in a local and regional context
- Copies of the draft report will be distributed to the Client or their Representative, Cadw and to the LPA's Archaeological Advisor thereafter for verification and approval. Copies of the approved, final, report will be issued to the Client, Cadw, the LPA's Archaeological Advisor, the local Historic Environment Record (HER) and the National Monuments Record at the RCAHMW. Reports will be issued in digital format (PDF/PDFA as appropriate) except where hard copies have been specifically requested, and will be supplied to the HER along with shapefiles containing location data for the areas investigated, if required, in line with *Guidance for the Submission of Data to the Welsh Historic Environment Records 2018*.
- 6.5 Should no further work be required, an ordered, indexed, and internally consistent site archive will be prepared and deposited in accordance with Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation (Archaeological Archives Forum 2007), the National Standard Guidance for Collecting and Depositing Archaeological Archives in Wales 2017 and any relevant museum guidelines.

Academic dissemination

As the limited scope of this work is likely to restrict its publication value, it is anticipated that a short publication note only will be produced, suitable for inclusion in the regional CBA journal, Archaeology in Wales. Subject to any contractual constraints, a summary of information from the project will also be entered onto the OASIS online database of archaeological projects in Britain including the upload of a digital (PDF) copy of the final report, which will appear on the Archaeology Data Service (ADS) website once the OASIS record has been verified.

Public dissemination

In addition to the ADS website, a digital (PDF) copy of the final report will also be made available for public viewing via Cotswold Archaeology's *Archaeological Reports Online* web page, generally within 12 months of completion of the project (http://reports.cotswoldarchaeology.co.uk/).

Archive deposition

6.8 CA will make arrangements with the Carmarthenshire County Museum/RCAHMW for the deposition of the site archive and, subject to agreement with the legal landowner(s), the artefact collection. The Carmarthenshire County Museum/RCAHMW will be consulted at this stage concerning their requirements and notified in advance of the expected time limits for deposition of the archive.

7. HEALTH AND SAFETY

7.1 CA will conduct all works in accordance with the Health and Safety at Work Act 1974 and all subsequent Health and Safety legislation, CA Health and Safety and Environmental policies and the CA Safety, Health and Environmental Management System (SHE), as well as any Principal Contractor's policies or procedures. A site-specific Construction Phase Plan (form SHE 017) will be formulated prior to commencement of fieldwork.

8. INSURANCES

8.1 CA holds Public Liability Insurance to a limit of £10,000,000 and Professional Indemnity Insurance to a limit of £10,000,000.

9. MONITORING

9.1 Notification of the start of site works will be made to Mike Ings (DAT) and Cadw's inspectorate, so that there will be opportunities to visit the site and check on the quality and progress of the work.

10. QUALITY ASSURANCE

10.1 CA is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (RO Ref. No. 8). As a RO, CA endorses the *Code of Conduct* (ClfA 2014) and the

Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology (ClfA 2014). All CA Project Managers and Project Officers hold either full Member or Associate status within the ClfA.

10.2 CA operates an internal quality assurance system in the following manner. Projects are overseen by a Project Manager who is responsible for the quality of the project. The Project Manager reports to the Chief Executive who bears ultimate responsibility for the conduct of all CA operations. Matters of policy and corporate strategy are determined by the Board of Directors, and in cases of dispute recourse may be made to the Chairman of the Board.

11. PUBLIC ENGAGEMENT, PARTICIPATION AND BENEFIT

11.1 This project will not afford opportunities for public engagement or participation during the course of the fieldwork. However, the results will be made publicly available on the ADS and Cotswold Archaeology websites, as set out in Section 6 above, in due course.

12. STAFF TRAINING AND CPD

- 12.1 CA has a fully documented mandatory Performance Management system for all staff which reviews personal performance, identifies areas for improvement, sets targets and ensures the provision of appropriate training within CA's adopted training policy. In addition, CA has developed an award-winning Career Development Programme for its staff, which ensures a consistent and high quality approach to the development of appropriate skills.
- 12.2 As part of the company's requirement for Continuing Professional Development, all members of staff are also required to maintain a Personal Development Plan and an associated log which is reviewed within the Performance Management system. All staff are subject to probationary periods on appointment, with monthly review; for site-based staff additional monthly Employee Performance Evaluations measure and record skills and identify training needs.

13. REFERENCES

- British Geological Survey (BGS), 2019, Geology of Britain Viewer http://maps.bgs.ac.uk/geology-viewer-google/googleviewer.html Accessed 7 August 2019
- Cadw 2018. Managing Scheduled Monuments in Wales
- Cotswold Archaeology (CA) 2018, Former Police Station, Carmarthen, Carmarthenshire:

 Heritage Assessment, CA Report No. **18170**
- Cotswold Archaeology 2019a Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire: Archaeological Evaluation and Strip, Map & Record. CA typescript report 6791.1
- Cotswold Archaeology 2019b Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire: Written Scheme of Investigation for an Archaeological Watching Brief
- Harrington, P. 1992, Archaeology of the English Civil War, Shire Publications Ltd
- Harrington, P. 2004, English Civil War Archaeology, B T Batsford
- James, T. 1991, 'Carmarthen's Civil War Defences. Discoveries at Carmarthen Greyfriars Excavations 1983-1990' in *The Carmarthenshire Antiquary XXVII*, The Carmarthenshire Antiquarian Society
- James, T. 1995, Excavations at Carmarthen Greyfriars 1983-1990
- Manning, A. 1998, Carmarthen Greyfriars, Carmarthen: the 1997 rescue excavations and watching brief on the site of the choir and area north of the friary, Cambria Archaeology
- O'Neill, B. H. St. J. 1938. The Bulwarks, Carmarthen, Archaeologia Cambrensis, 93
- Osborne, M. 2004, Sieges and Fortifications of the Civil Wars in Britain, Partizan Press

APPENDIX A: COTSWOLD ARCHAEOLOGY SPECIALISTS

Ceramics

Neolithic/Bronze Age Ed McSloy BA MCIFA (CA)

Emily Edwards (freelance)

Dr Elaine Morris BA PhD FSA MCIFA (University of Southampton)

Iron Age/Roman Ed McSloy BA MCIFA (CA)

Kayt Marter Brown BA MSc MCIFA (freelance)

(Samian) Gwladys Montell MA PhD (freelance)
(Amphorae stamps) Dr David Williams PhD FSA (freelance)

Anglo-Saxon Paul Blinkhorn BTech (freelance)

Dr Jane Timby BA PhD FSA MCIFA (freelance)

Medieval/post-medieval Ed McSloy BA MCIFA (CA)

Kayt Marter Brown BA MSc MCIFA (freelance)

Stephanie Ratkai BA (freelance) Paul Blinkhorn BTech (freelance) John Allan BA MPhil FSA (freelance)

South West Henrietta Quinnell BA FSA MCIFA (University of Exeter)

Clay tobacco pipe Reg Jackson MLitt MCIFA (freelance)

Marek Lewcun (freelance)

Ceramic Building Material Ed McSloy MCIFA (CA)

Dr Peter Warry PhD (freelance)

Other Finds

Small Finds Ed McSloy BA MCIFA (CA)

Metal Artefacts Katie Marsden BSc (CA)

Dr Jörn Schuster MA DPhil FSA MCIFA (freelance)

Dr Hilary Cool BA PhD FSA (freelance)

Lithics Ed McSloy BA MCIFA (CA)

Jacky Sommerville BSc MA PCIFA (CA)

(Palaeolithic) Dr Francis Wenban-Smith BA MA PhD (University of Southampton)

Worked Stone Dr Ruth Shaffrey BA PhD MCIFA (freelance)

Dr Kevin Hayward FSA BSc MSc PhD PCIFA (freelance)

Inscriptions Dr Roger Tomlin MA DPhil, FSA (Oxford)

Glass Ed McSloy MCIFA (CA)

Dr Hilary Cool BA PhD FSA (freelance)

Dr David Dungworth BA PhD (freelance; English Heritage)

Coins Ed McSloy BA MCIFA (CA)

Dr Peter Guest BA PhD FSA (Cardiff University)
Dr Richard Reece BSc PhD FSA (freelance)

Leather Quita Mould MA FSA (freelance)

Textiles Penelope Walton Rogers FSA Dip Acc. (freelance)

Iron slag/metal technology Dr Tim Young MA PhD (Cardiff University)

Dr David Starley BSc PhD

Worked wood Michael Bamforth BSc MCIFA (freelance)

Biological Remains

Animal bone Dr Philip Armitage MSc PhD MCIFA (freelance)

Dr Matilda Holmes BSc MSc ACIFA (freelance)

Human Bone Sharon Clough BA MSc MCIFA (CA)

Environmental sampling Sarah Wyles BA PCIFA (CA)

Sarah Cobain BSc MSc ACIFA (CA)

Dr Keith Wilkinson BSc PhD MCIFA (ARCA)

Pollen Dr Michael Grant BSc MSc PhD (University of Southampton)

Dr Rob Batchelor BSc MSc PhD MCIFA (QUEST, University of Reading)

Diatoms Dr Tom Hill BSc PhD CPLHE (Natural History Museum)

Dr Nigel Cameron BSc MSc PhD (University College London)

Charred Plant Remains Sarah Wyles BA PCIFA (CA)

Sarah Cobain BSc MSc ACIFA (CA)

Wood/Charcoal Sarah Cobain BSc MSc ACIFA(CA)

Dana Challinor MA (freelance)

Insects Enid Allison BSc D.Phil (Canterbury Archaeological Trust)

Dr David Smith MA PhD (University of Birmingham)

Mollusca Sarah Wyles BA PCIFA (CA)

Dr Keith Wilkinson BSc PhD MCIFA (ARCA)

Ostracods and Foraminifera Dr John Whittaker BSc PhD (freelance)

Fish bones Dr Philip Armitage MSc PhD MCIFA (freelance)

Geoarchaeology Dr Keith Wilkinson BSc PhD MCIFA (ARCA)

Soil micromorphology Dr Richard Macphail BSc MSc PhD (University College London)

Scientific Dating

Dendrochronology Robert Howard BA (NTRDL Nottingham)

Radiocarbon dating SUERC (East Kilbride, Scotland)

Beta Analytic (Florida, USA)

Archaeomagnetic dating Dr Cathy Batt BSc PhD (University of Bradford)

TL/OSL Dating Dr Phil Toms BSc PhD (University of Gloucestershire)

Conservation Karen Barker BSc (freelance)

Pieta Greaves BSc MSc ACR (Drakon Heritage and Conservation)

APPENDIX B: ARCHAEOLOGICAL STANDARDS AND GUIDELINES

- AAF 2007 Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation.

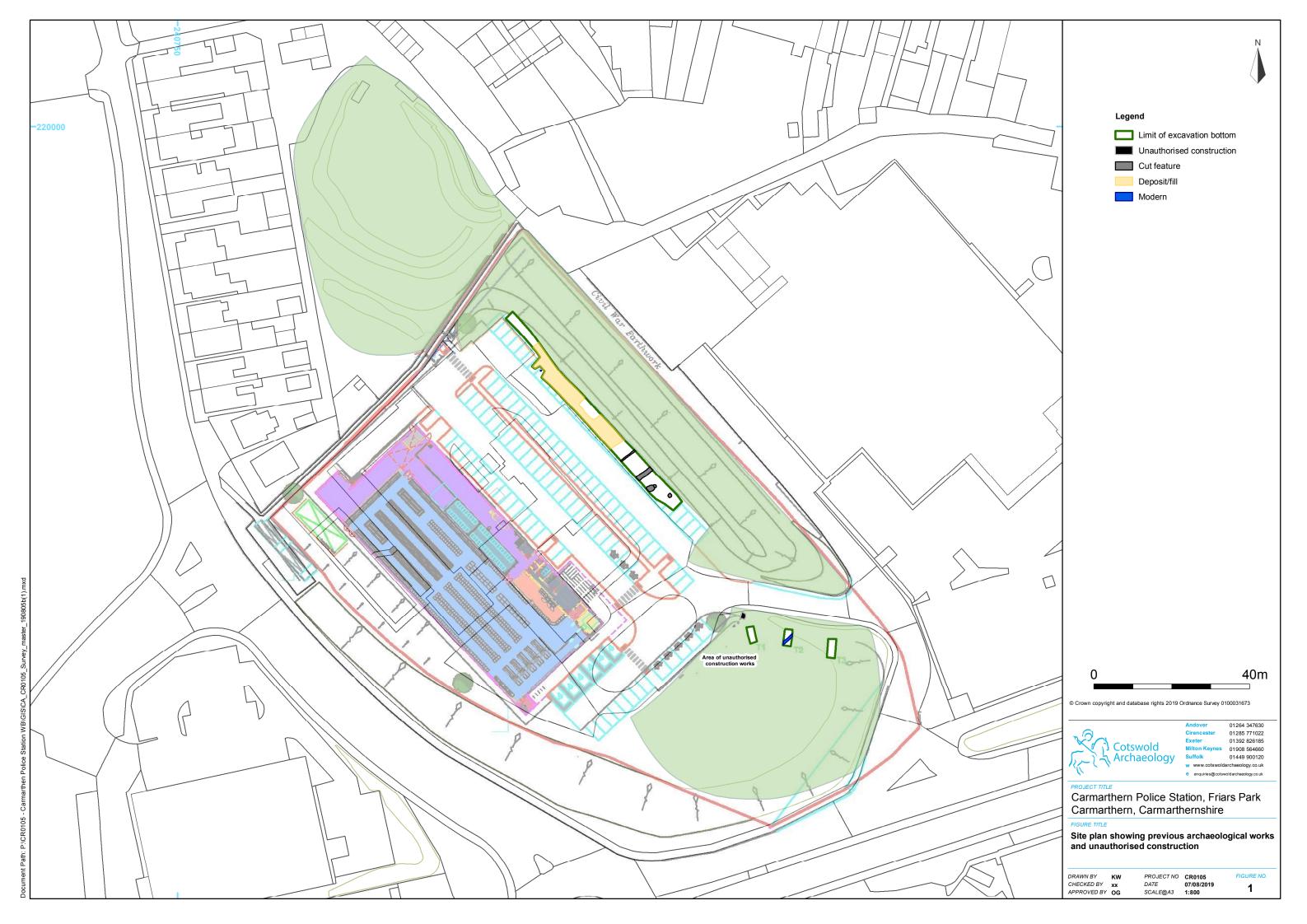
 Archaeological Archives Forum
- AAI&S 1988 The Illustration of Lithic Artifacts: A guide to drawing stone tools for specialist reports. Association of Archaeological Illustrators and Surveyors Paper 9
- AAI&S 1994 The Illustration of Wooden Artifacts: An Introduction and Guide to the Depiction of Wooden Objects.

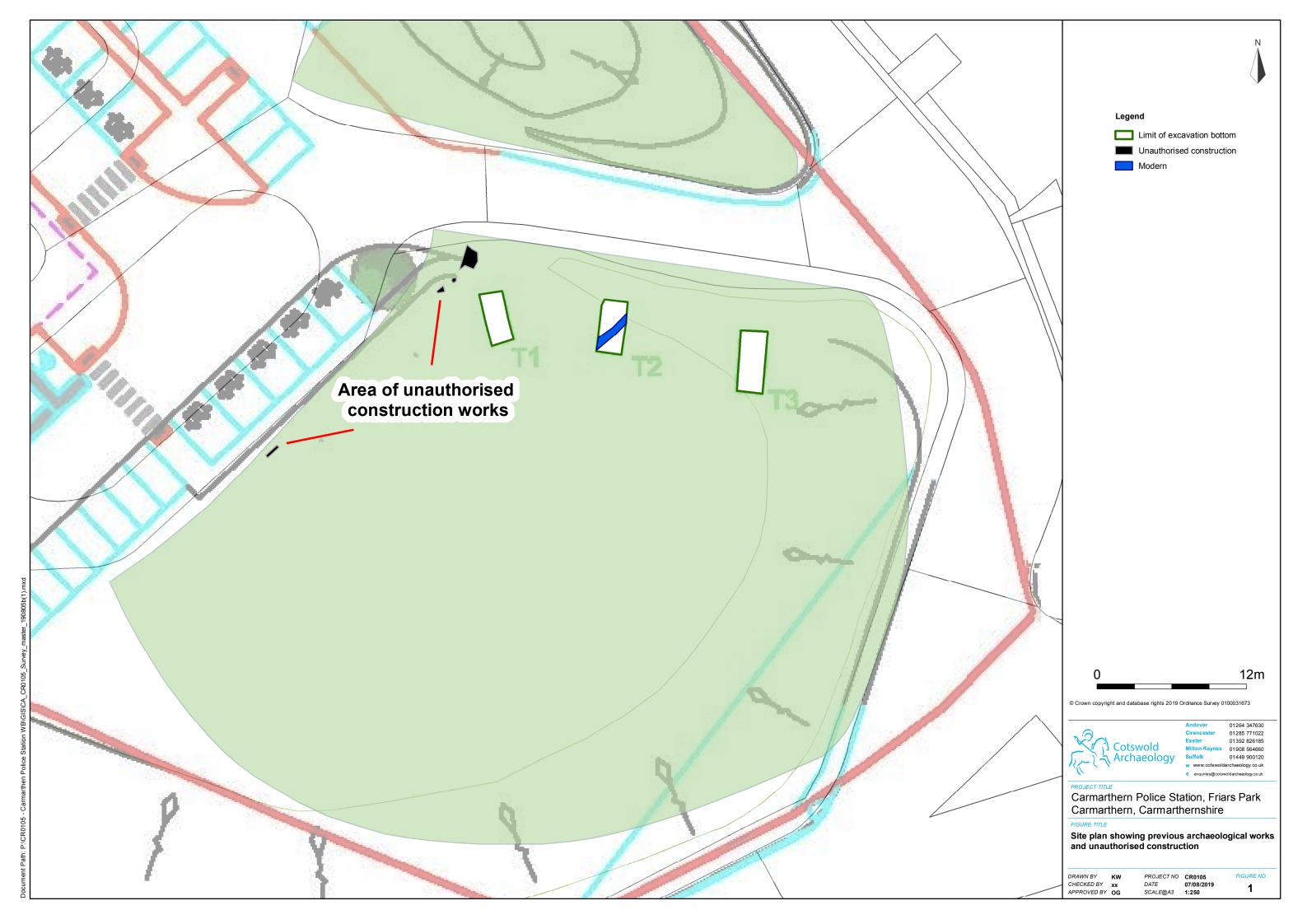
 Association of Archaeological Illustrators and Surveyors Paper 11
- AAI&S 1997. Aspects of Illustration: Prehistoric pottery. Association of Archaeological Illustrators and Surveyors Paper 13
- AAI&S nd *Introduction to Drawing Archaeological Pottery*. Association of Archaeological Illustrators and Surveyors, Graphic Archaeology Occasional Papers 1
- ACBMG 2004 Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material. (third edition) Archaeological Ceramic Building Materials Group
- AEA 1995 Environmental Archaeology and Archaeological Evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England. Working Papers of the Association for Environmental Archaeology No. 2
- BABAO and IFA, 2004 Guidelines to the Standards for Recording Human Remains. British Association for Biological Anthropology and Osteoarchaeology and Institute of Field Archaeologists. Institute of Field Archaeologists Technical Paper 7 (Reading)
- Barber, B., Carver, J., Hinton, P. and Nixon, T. 2008 Archaeology and development. A good practice guide to managing risk and maximising benefit. Construction Industry Research and Information Association Report C672
- Bayley, J. (ed) 1998 Science in Archaeology. An agenda for the future. English Heritage (London)
- Bewley, R., Donoghue, D., Gaffney, V., Van Leusen, M., Wise, M., 1998 Archiving Aerial Photography and Remote Sensing Data: A guide to good practice. Archaeology Data Service
- Blake, H. and P. Davey (eds) 1983 Guidelines for the processing and publication of Medieval pottery from excavations, report by a working party of the Medieval Pottery Research Group and the Department of the Environment. Directorate of Ancient Monuments and Historic Buildings Occasional Paper 5, 23-34, DoE, London
- Brickley, M. and McKinley, J.I., 2004 *Guidelines to the Standards for Recording Human Remains*. IFA Paper No 7,Institute of Field Archaeologists (Reading)
- Brickstock, R.J. 2004 The Production, Analysis and Standardisation of Romano-British Coin Reports. English Heritage (Swindon)
- Brown, A. and Perrin, K. 2000 A Model for the Description of Archaeological Archives. English Heritage Centre for Archaeology/ Institute of Field Archaeologists (Reading)
- Brown, D.H. 2007 Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation. IFA Archaeological Archives Forum (Reading)
- Buikstra, J.E. and Ubelaker D.H. (eds) 1994 Standards for Data Collection from Human Skeletal Remains. (Fayetteville, Arkansas)
- ClfA, 2014, Code of Approved Practice for the Regulation of Contractual Arrangements in Field
- Archaeology. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Desk-based Assessment. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Watching Brief. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Excavation. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings or Structures. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of
- Archaeological Archives. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Field Evaluation. Chartered Institute for Archaeologists (Reading)
- Clark, J., Darlington, J. and Fairclough, G. 2004 Using Historic Landscape Characterisation. English Heritage (London)
- Coles, J.M., 1990 Waterlogged Wood: guidelines on the recording, sampling, conservation and curation of structural wood. English Heritage (London)
- Cowton, J., 1997 Spectrum. The UK Museums Documentation Standard. Second edition. Museums Documentation Association
- Cox, M., 2002 Crypt Archaeology: an approach. Institute of Field Archaeologists Technical Paper 3 (Reading)
- Darvill, T. and Atkins, M., 1991 Regulating Archaeological Works by Contract. IFA Technical Paper No 8, Institute of Field Archaeologists (Reading)

- Davey P.J. 1981 Guidelines for the processing and publication of clay pipes from excavations. Medieval and Later Pottery in Wales, IV, 65-87
- Eiteljorg, H., Fernie, K., Huggett, J. and Robinson, D. 2002 CAD: A guide to good practice. Archaeology Data Service (York)
- EA 2005 Guidance on Assessing the Risk Posed by Land Contamination and its Remediation on Archaeological Resource Management. English Heritage/ Environment Agency Science Report P5-077/SR (Bristol)
- EH 1995 A Strategy for the Care and Investigation of Finds. English Heritage Ancient Monuments Laboratory (London)
- EH 1998 Identifying and Protecting Palaeolithic Remains. Archaeological guidance for planning authorities and developers. English Heritage (London)
- EH 1999 Guidelines for the Conservation of Textiles. English Heritage (London)
- EH 2000, Managing Lithic Scatters. Archaeological guidance for planning authorities and developers. English Heritage (London)
- EH 2002 With Alidade and Tape: graphical and plane table survey of archaeological earthworks. English Heritage (Swindon)
- EH 2003a Where on Earth Are We? The Global Positioning System (GPS) in archaeological field survey. English Heritage (London)
- EH 2003b Twentieth-Century Military Sites. Current approaches to their recording and conservation English Heritage (Swindon)
- EH 2004a Dendrochronology. Guidelines on producing and interpreting dendrochronological dates. English Heritage (Swindon)
- EH 2004b Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical report. English Heritage Centre for Archaeology Guidelines
- EH 2006a Guidelines on the X-radiography of Archaeological Metalwork. English Heritage (Swindon)
- EH 2006b Archaeomagnetic Dating. English Heritage (Swindon)
- EH 2006c Science for Historic Industries: Guidelines for the investigation of 17th- to 19th-century industries. English Heritage (Swindon)
- EH 2007a Understanding the Archaeology of Landscapes. A guide to good recording practice. English Heritage (Swindon)
- EH 2007b Geoarchaeology. Using earth sciences to understand the archaeological record. (London)
- EH 2008a Luminescence Dating. Guidelines on using luminescence dating in archaeology. English Heritage (Swindon)
- EH 2008b Geophysical Survey in Archaeological Field Evaluation. English Heritage Research and Professional Services Guidelines No 1 (second edition). English Heritage (Swindon)
- EH 2008c Research and Conservation Framework for the British Palaeolithic. English Heritage/Prehistoric Society (Swindon)
- EH 2008d Investigative Conservation. Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use. English Heritage (Swindon)
- EH 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of archaeological wood. English Heritage (London)
- EH 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation. English Heritage Centre for Archaeology Guidelines (London)
- EH 2012, Guidelines for the Care of Waterlogged Organic Artefacts: guidelines on their recovery, analysis and conservation.
- EH 2014 Our Portable Past: a statement of English Heritage policy and good practice for portable antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal detectors). English Heritage (Swindon)
- EH and Church of England, 2005, Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England. English Heritage (London)
- Ferguson, L. and Murray, D., 1997, Archaeological Documentary Archives. IFA Paper 1, Institute of Field Archaeologists (Reading)
- Gaffney, C. and Gater, J., with Ovenden, S., 2002, *The Use of Geophysical Techniques in Archaeological Evaluations*. IFA Technical Paper 9, Institute of Field Archaeologists (Reading)
- Gillings, M. and Wise, A., 1999, GIS: A guide to good practice. Archaeology Data Service (York)
- Gurney, D.A., 1985, Phosphate Analysis of Soils: A Guide for the Field Archaeologist. IFA Technical Paper 3, Institute of Field Archaeologists (Reading)
- HE 2015a Archaeometallurgy: Guidelines for Best Practice. Historic England (Swindon)
- HE 2015b (revised 2008), Metric Survey Specifications for Cultural Heritage. Historic England (Swindon)
- HE 2015c Management of Research Projects in the Historic Environment. The MoRPHE Project Managers' Guide. Historic England (Swindon)
- Handley, M., 1999, *Microfilming Archaeological Archives*. IFA Technical Paper 2, Institute of Field Archaeologists (Reading)
- Mays, S., 1991, Recommendations for Processing Human Bone from Archaeological Sites. Ancient Monuments Lab Report 124/91 (London)
- Mays, S., Brickley, M. and Dodwell, N., 2002, *Human Bones from Archaeological Sites. Guidelines for Producing Assessment Documents and Analytical Reports.* Centre for Archaeology Guidelines, English Heritage (Portsmouth)

- McKinley, J.I. and Roberts, C., 1993, Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains. Institute of Field Archaeologists Technical Paper No. 13 (Reading)
- MGC, 1992, Standards in the Museum Care of Archaeological Collections. Museums and Galleries Commission Murphy, P.L. and Wiltshire, P.E.J. 1994, A Guide to Sampling Archaeological Deposits for Environmental Analysis. English Heritage (London)
- MPRG 2000, A Guide to the Classification of Medieval Ceramics. Medieval Pottery Research Group Occasional Papers No. 1.
- MPRG 2001, Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics. Medieval Pottery Research Group
- Owen, J., 1995, Towards an Accessible Archaeological Archive. The Transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales. Society of Museum Archaeologists
- PCRG 1997, The Study of Later Prehistoric Pottery: General polices and guidelines for analysis and publication.

 Prehistoric Ceramics Research Group Occasional Paper 12
- Philo, C. and Swann, A., 1992, *Preparation of Artwork for Publication*. Institute of Field Archaeologists Technical Paper No. 10 (Reading)
- RCHME 1999, Recording Archaeological Field Monuments: A descriptive specification. RCHME (Swindon)
- RCHME 2007, MIDAS: A manual and data standard for monuments inventories. RCHME (Swindon)
- Schofield, A J, (ed) 1998, Interpreting Artefact Scatters. Oxbow Monograph 4 (Oxford)
- Richards, J. and Robinson, D. (eds), 2001, *Digital Archives From Excavation and Fieldwork: A guide to good practice*. Archaeology Data Service
- Robinson, W., 1998, First Aid for Underwater Finds. Archetype Books (London)
- RFG and FRG, 1993, Guidelines for the Preparation of Site and Assessments for all Finds other than Fired Clay Vessels. Roman Finds Group And Finds Research Group
- Schmidt, A., 2001, Geophysical Data in Archaeology: A guide to good practice. Archaeology Data Service
- SGRP, 1994, Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery
- SMA, 1993, Guidelines on the Selection, Retention and Dispersal of Archaeological Collections. Society of Museum Archaeologists
- UKIC, 1983, Packaging and Štorage of Freshly Excavated Artefacts from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 2)
- UKIC, 1984, Environmental Standards for Permanent Storage of Excavated material from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 3)
- UKIC, 1990, Guidance for Conservation Practice. United Kingdom Institute for Conservation
- UKIC, 1990, Guidelines for the Preparation of Excavation Archives for Long-term Storage. United Kingdom Institute for Conservation Archaeology Section
- UKIC, 2001, Excavated Artefacts and Conservation. (United Kingdom Institute for Conservation,
- Conservation Guidelines No 1, revised)
- Watkinson, D.E., and Neal, V., 1998, First Aid for Finds. (3rd edition) RESCUE/United Kingdom Institute for Conservation, Archaeology Section and Museum of London
- Willis, S., 1997, (ed) Research Frameworks for the Study of Roman Pottery. Study Group for Roman Pottery
- World Archaeology Congress 1989, *The Vermillion Accord Human Remains*. Motion Approved at the First Inter-Congress on the Disposal of the Dead (Vermillion)
- Young C., 1980, Guidelines for the Processing and Publication of Roman Pottery. Department of the Environment







Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 1, Clyst Units Cofton Road Marsh Barton Exeter EX2 8QW

t: 01392 573970

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive, Stonebridge Milton Keynes Buckinghamshire MK13 0AT

t: 01908 564660

Suffolk Office

Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ

t: 01449 900120

e: enquiries@cotswoldarchaeology.co.uk







Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

Written Scheme of Investigation for an Archaeological Watching Brief



Lidl Great Britain Ltd

CA Project: CR0105

June 2019



Carmarthen Police Station Friars Park Carmarthen Carmarthenshire

Written Scheme of Investigation for an Archaeological Watching Brief

CA Project: CR0105















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1. INTRODUCTION

- 1.1 This document sets out details of a *Written Scheme of Investigation* (WSI) by Cotswold Archaeology (CA) for an archaeological watching brief at Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire centred on National Grid Reference (NGR) 240831 219897 at the request of Lidl Great Britain Ltd.
- 1.2 Planning permission (ref: W/37401) for the demolition of existing buildings and the development of a Lidl store with associated parking, delivery arrangements and widening of current access road was granted by Carmarthenshire County Council (CCC). The works are conditional on a Scheduled Monument Consent (SMC), which stipulated the necessity of a programme of Archaeological Watching Brief where proposed groundwork relating to the widening of the access road, service trenching, and development construction may potentially impact upon the Scheduled Ancient Monument, 'The Bulwarks' (Cadw ref. CM009). Will Davies, Regional Inspector of Ancient Monuments and Archaeology (RIAMA) (North East Wales) for Cadw (the consenting authority for scheduled monuments) designed the condition in order to preserve the SAM by record where/if impact is unavoidable. The work was subsequently approved by Mike Ings, Senior Planning Archaeologist for the Dyfed Archaeological Trust (DAT). The proposed watching brief follows a programme of archaeological evaluation undertaken by CA (2019).
- 1.3 This WSI has been guided in its composition by Standard and guidance: Archaeological watching brief (ClfA 2014) and the information gathered during the previous investigations.

The site

1.4 The proposed development area is approximately 1.3ha, and comprises the buildings of a former police station and associated car parks and access roads adjacent to the earthworks of The Bulwarks Scheduled Monument. It is bounded to the west by Morfa Lane, to the south by the A4242, to the east by Friars Park and to the north by residential properties and further earthworks of The Bulwarks. Within the eastern area of the proposed development are the bank and southern bastion remnant of the Scheduled Monument. The site lies at approximately 17m above Ordnance Datum (aOD), but occupies a point of high ground, sloping suddenly downwards to the roads in the south and west.

1.5 The underlying bedrock geology of the area is mapped as Tetragraptus Beds – Mudstone, sedimentary bedrock formed approximately 466 to 478 million years ago in a local environment dominated be deep seas. Superficial deposits of Devensian Sand and Gravel are also recorded. These are glaciofluvial in origin, forming up to two million years ago in ice age conditions (BGS 2019). This is consistent with the geology encountered during the evaluation (CA 2019).

2. ARCHAEOLOGICAL BACKGROUND

- 2.1 The site has previously been the subject of a Heritage Desk-Based Assessment (CA 2018). Reference should be made to this document for detailed background information; the below is a summary of the Assessment's findings.
- 2.2 Carmarthen was the *civitas* of the *Demetae* tribe known as *Moridinum* (meaning *sea fort*) during the Romano-British period. The initial fort is believed to date to about AD75, possibly replacing the Iron Age hillfort on Merlin's Hill *c.* 2km to the north-west of the site. By AD120 the civilian *vicus* had been established and a new fort built further to the south, by the river, on the location of the medieval castle *c.* 600m to the east of the site. Although no evidence has been recorded of extra-mural Romano-British settlement within the wider area of the town, the proposed development area may have been close to a conjectured Romano-British road, *c.* 170m to the north of the site (*ibid.*).
- 2.3 In the early medieval period the settlement was known as *Llanteulyddog* and its strategic importance was such that a castle was built in 1094. The castle was destroyed and rebuilt several times until 1223 when a town wall was constructed. During the 13th century Franciscan friars established themselves in the town and by 1284 had their own friary buildings on Lammas Street, 70m to the east of the site (*ibid.*).
- In the post-medieval period Carmarthen's main income centred on agriculture and the wool trade, with mills and wool mills sited around the town (*ibid*.). During the Civil War the town was a Royalist stronghold, and the aging medieval fortifications were strengthened around the town. This included within the western part of the town, around and within the now dissolved Franciscan friary; this resulted in the

earthworks of The Bulwarks, which were constructed over parts of the friary grounds (*ibid*.). Archaeological excavations within the Friar's Park area, *c*. 60m to the east of the site, revealed several Civil War trenches and features cutting through the medieval remains of the Friary, and evidence of earlier medieval layers (James 1995; Manning 1998).

'The Bulwarks' Scheduled Monument (Cadw ref: CM009)

- 2.5 Cadw's Scheduled Monument description states that 'The monument comprises the remains of earthwork defences dating to the Civil War, 1642-51 and built to protect west Carmarthen then held for the Royalists. Further stretches existed originally but these have now been destroyed. The earthworks comprise the remains of low wide walls and associated ditches designed to absorb shot combined with bastions to protect the walls and for positioning artillery. A central section of bank survives to a height of *c*. 0.7m fronted to the west by a ditch *c*. 1.6m deep externally and 2.3m above the crest of the bank. North and south of this are two polygonal projecting bastions. Only the northern is well preserved, with the depth of the ditch being *c*. 2m below the exterior and 4m below the crest of the now slight bank' (Cadw 2018).
- 2.6 The Bulwarks are considered to be one of the best examples of Civil War earthern town defences that still remain in Britain. They would have originally formed part of a larger *enceinte*, enclosing the old medieval walls and suburbs of Carmarthen with lengths of bank and ditch, interspersed with regularly spaced bastions to provide platforms for artillery and flanking musketry. O'Neil references an additional section which survived in a field known as Parc y Bulwark but was demolished in the 1860's (O'Neil 1938), which suggests that at one time the defences did encircle the town.
- 2.7 It is likely The Bulwarks were constructed after the Royalists under Colonel Charles Gerard recaptured the town from Parliament in June 1644 where he is said to be 'fortifying it for the King'. It is likely that these defences replaced the earlier 'mud wall' which is noted as facing the Parliamentarians during their capture of the town in April 1644 under Colonel Laugharne (O'Neil 1938). James has thrown this assertion into question, suggesting that there is little documentary evidence of the 'mud wall' which pre-dates the arrival of Gerard, although he does concede that it is likely Laugharne faced some form of defence in early 1644 which supplemented the pre-existing medieval walls (James 1991). This is further reinforced by Laugharne himself, who gave some impression of the size of the existing defences, stating that the perimeter required at least 1000 men to defend it (Osborne 2004). It is probable

that Gerard, an experienced soldier, modified the existing defences into a more modern style learnt during his time in the Low Countries and that the monument which survives today is largely the result of his work (Harrington 1992, O'Neil 1938, James 1991). Evidence of an earlier phase of defensive work was identified during excavations at Friar's Park, immediately east of the monument, which James suggests is from a poorly planned and possibly unfinished earlier defensive system. Certainly the sheer scale of the ditches (4.4m deep and c. 6m wide) suggests a defensive function and the recovered dating evidence and stratigraphic relationship with earlier features suggests a mid-17th century date for construction. If this is the case, the layout of The Bulwarks does not appear to respect the earlier identified defences and as such likely represents a newly planned defensive system. Although it is possible older defences still remained extant as internal defensive points, with the evidence from the upper fills of the ditches identified at Friars Park, suggesting that in some cases they were not entirely backfilled until the 19th century (James 1991). Harrington suggests that it is likely the Friar's Park ditches were built as earlier defences in 1643 or as an internal, secondary line of defence to supplement The Bulwarks (Harrington 2004).

2.8 The Bulwarks monument mostly survives well, however the southern demi-bastion, which likely formed the south-western corner of the whole *enceinte*, has seen considerable modern disturbance, likely during the construction of the Police station. This has included the creation of an access through the monument immediately north of the demi-bastion and the general levelling and landscaping of the demi-bastion itself. The layout of the southern part of the monument is therefore considerably changed from that which was recorded during a survey in 1937 (O'Neil 1938).

Evaluation (CA 2019), (Fig. 1)

2.9 Four trenches were dug in April 2019 and possible evidence associated with the Civil War defences 'The Bulwarks' Scheduled Monument was noted in Trench 2 in the form of a deposit containing pottery of 16th or 17th century date, animal bone and a clay pipe fragment, potentially part of the monument make up, with another possible deposit identified in Trench 1. Trench 4 was a larger strip, map & record area alongside the defensive ditch of 'The Bulwarks' and a small number of undated features were identified, most notable of which were two parallel linears likely to predate the earthwork. There was no evidence of any additional defensive features than

previously identified, with the whole area showing evidence of having been disturbed and levelled in the modern period.

3. AIMS AND OBJECTIVES

- 3.1 The objectives of the archaeological works are:
 - 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;
 - 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.

Specific Aims:

- To further identify the nature of any potential Civil War Deposits during the extension
 of the access road so that a clear plan and profile is recorded of large deposits and
 discrete features where they are encountered.
- 3.2 If significant archaeological remains are identified, reference will be made to the appropriate research framework, at http://www.algao.org.uk/england/research_frameworks, so that the remains can, if possible, be placed within their local and regional context.

4. METHODOLOGY

Excavation and recording

4.1 The watching brief comprises the observation by a competent archaeologist of all intrusive groundworks, including the excavation of foundations and service trenches. Non-archaeologically significant deposits will be removed by the contractors under archaeological supervision. Where mechanical excavators are used, these will be equipped with a **toothless bucket**.

Road Extension

- 4.2 In the event that the Access Road extension reveals Civil War period archaeological deposits (ascertained by competent archaeologist) work will cease and Lidl Great Britain Ltd and Will Davies from Cadw will be contacted immediately. Once Will has agreed, large deposits will be excavated by a machine with a toothless bucket and monitored carefully revealing their full extent within the parameters of the trenching as far as possible, so that they can be accurately surveyed and mapped.
- 4.3 Where large Civil War Period archaeological deposits are encountered, once Will Davies from Cadw has been informed and his permission given a competent archaeologist will monitor the mechanical excavation in **50-100mm spits** with a **toothless bucket**, down to the formation level so as to reveal potential earthwork profiles accurately and recover artefactual data.

Services, foundations and associated development infrastructure

- 4.3 Other Groundworks that encounter large Civil war period features and deposits before the formation level will be have to precede with the competent archaeologist as above (4.2, 4.3)
- If archaeological deposits are encountered they will be planned and recorded in accordance with Technical Manual 1 *Fieldwork Recording Manual*. Each context will be recorded on a pro-forma context sheet by written and measured description; principal deposits will be recorded by drawn plans (scale 1:20 or 1:50, or electronically using Leica GPS as appropriate) and drawn sections (scale 1:10 or 1:20 as appropriate). Should detailed feature planning be undertaken using GPS this will be carried out in accordance with Technical Manual 4 *Survey Manual*. Photographs (digital colour) will be taken as appropriate. All finds and samples will be bagged separately and related to the context record. All artefacts will be recovered and retained for processing and analysis in accordance with Technical Manual 3 *Treatment of Finds Immediately after Excavation*.
- 4.5 In the event of archaeological deposits being found for which the resources allocated are not sufficient to support treatment to a satisfactory and proper standard or which are of sufficient significance to merit an alternative approach such as contingency excavation or physical preservation, Lidl Great Britain Ltd and Will Davies from Cadw will be contacted immediately. Ground works in that area will

cease until agreement has been reached on an appropriate archaeological response.

Artefact retention and discard

4.6 Artefacts from topsoil and subsoil and un-stratified contexts will normally be noted but not retained unless they are of intrinsic interest (e.g. worked flint or flint debitage, featured pottery sherds, and other potential 'registered artefacts'). All artefacts will be collected from stratified excavated contexts except for large assemblages of modern material. Such material may be noted and not retained, or, if appropriate, a representative sample may be collected and retained.

Human remains

4.7 In the case of the discovery of human remains (skeletal or cremated), at all times they should be treated with due decency and respect. Where human remains are encountered, these will not be excavated unless their disturbance by the development is unavoidable. In cases where exhumation of human remains is deemed unavoidable/necessary, this will be conducted following the provisions of the Coroners Unit in the Ministry of Justice. All excavation and post-excavation processes will be in accordance with the standards set out in CIfA Technical Paper No 7 Guidelines to the Standards for recording Human Remains (CIfA 2004).

Environmental remains

- 4.8 Due care will be taken to identify deposits which may have environmental potential, and where appropriate, a programme of environmental sampling will be initiated. This will follow the Historic England environmental sampling guidelines outlined in Environmental Archaeology, A guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (English Heritage 2011), and CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites. The sampling strategy will be adapted for the specific circumstances of the site, in close consultation with the CA Environmental Officer.
- 4.9 The processing of the samples will be done in conjunction with the relevant specialist following the Historic England general environmental processing guidelines (English Heritage 2011). Flotation or wet sieve samples will be processed to 0.25mm. Other more specialist samples such as those for pollen will be prepared

by the relevant specialist. Further details of the general sampling policy and the methods of taking and processing specific sample types are contained within *CA Technical Manual 2: The Taking and Processing of Environmental and Other Samples from Archaeological Sites*.

Treasure

4.10 Upon discovery of Treasure CA will notify the client and the curator immediately. CA will comply fully with the provisions of the Treasure Act 1996 and the Code of Practice referred to therein. Findings will be reported to the coroner within 14 days.

5. STAFF AND TIMETABLE

- 5.1 This project will be under the management of Oliver Good MCIfA, Project Manager, CA.
- 5.2 The staffing structure will be organised thus: the Project Manager will direct the overall conduct of the watching brief as required during the period of fieldwork. Day to day responsibility however will rest with the Project Leader who will be on-site throughout the project.
- 5.3 The field team will consist of a Project Leader, supplemented by additional Archaeologists as required.
- 5.4 The duration of the fieldwork will be dependent upon the contractor's programme.
- 5.5 Specialists who will be invited to advise and report on specific aspects of the project as necessary are:

Ceramics Ed McSloy MCIfA (CA)
Metalwork Ed McSloy MCIfA (CA)

Flint Jacky Sommerville PCIfA (CA)

Animal Bone Andy Clarke (CA)/

Matty Holmes BSc MSc ACIfA (freelance)

Human Bone Sharon Clough MClfA (CA)
Environmental Remains Sarah Wyles PClfA (CA)

Conservation Pieta Greeves BSc MSc ACR

(Drakon Heritage and Conservation)

Geoarchaeology Dr Keith Wilkinson (ARCA)

Building Recording Peter Davenport MCIfA, FSA (CA)

5.6 Depending upon the nature of the deposits and artefacts encountered it may be necessary to consult other specialists not listed here. A full list of specialists currently used by Cotswold Archaeology is contained within Appendix A.

6. POST-EXCAVATION, ARCHIVING AND REPORTING

- 6.1 Following completion of fieldwork, all artefacts and environmental samples will be processed, assessed, conserved and packaged in accordance with CA Technical Manuals and Carmarthenshire County Museum/Royal Commission on the Ancient and Historical Monuments of Wales (RCAHMW) guidelines. A recommendation will be made regarding material deemed suitable for disposal/dispersal in line with the relevant recipient Museums' collection policy.
- 6.2 An illustrated report will be compiled on the results of the fieldwork and assessment of the artefacts, palaeoenvironmental samples etc. The report will include:
 - (i) an abstract containing the essential elements of the results preceding the main body of the report, and a summary of the project's background;
 - (ii) description and illustration of the site location;
 - (iii) a methodology of the works undertaken;
 - (iv) integration of, or cross-reference to, appropriate cartographic and documentary evidence and the results of other research undertaken, where relevant to the interpretation of the watching brief results;
 - (v) a description of the project's results;
 - (vi) an interpretation of the results in the appropriate context;
 - (vii) a summary of the contents of the project archive and its location (including summary catalogues of finds and samples);
 - (viii) a site location plan at an appropriate scale on an Ordnance Survey, or equivalent, base-map;
 - (ix) a plan showing the location of the areas observed and exposed archaeological features and deposits in relation to the site boundaries;
 - (x) plans of each area in which archaeological features are recognised. These will be at an appropriate scale to allow the nature of the features exposed to be shown and understood. Plans will show the orientation of features recorded in relation to

- north. Section drawing locations will be shown on these plans. Archaeologically sterile areas will not be illustrated unless this can provide information on the development of the site stratigraphy or show palaeoenvironmental deposits that have influenced the site stratigraphy;
- (xi) section drawings of areas/trenches and features will be included where appropriate, with OD heights and at scales appropriate to the stratigraphic detail being represented. These will show the orientation of the drawing in relation to north/south/east/west. Archaeologically sterile trenches will not be illustrated unless they provide significant information on the development of the site stratigraphy or show palaeoenvironmental deposits that have influenced the site stratigraphy;
- (xiii) photographs showing significant features and deposits that are referred to in the text. All photographs will contain appropriate scales, the size of which will be noted in the illustration's caption;
- (xiv) a consideration of evidence within its wider local/regional context;
- (xv) a summary table and descriptive text showing the features, classes and numbers of artefacts recovered and soil profiles with interpretation;
- (xvi) specialist assessment or analysis reports where undertaken;
- 6.3 Specialist artefact and palaeoenvironmental assessment will take into account the wider local/regional context of the archaeology and will include:
 - (i) specialist aims and objectives
 - (ii) processing methodologies (where relevant)
 - (iii) any known biases in recovery, or problems of contamination/residuality
 - (iv) quantity of material; types of material present; distribution of material
 - (v) for environmental material, a statement on abundance, diversity and preservation
 - (vi) summary and discussion of the results to include significance in a local and regional context
- 6.4 Copies of the <u>draft report</u> will be distributed to the Client or their Representative and to the LPA's Archaeological Advisor thereafter for verification and approval. Thereafter, copies of the <u>approved report</u> will be issued to the Client, LPA's Archaeological Advisor and the local Historic Environment Record (HER). Reports will be issued in digital format (PDF/PDFA as appropriate) except where hard copies have been specifically requested, and will be supplied to the HER along with shapefiles containing location data for the areas investigated, if required.

6.5 Should no further work be required, an ordered, indexed, and internally consistent site archive will be prepared and deposited in accordance with *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Archaeological Archives Forum 2007) and the relevant museum guidelines.

Academic dissemination

As the limited scope of this work is likely to restrict its publication value, it is anticipated that a short publication note only will be produced, suitable for inclusion within an appropriate local archaeological journal. Subject to any contractual constraints, a summary of information from the project will also be entered onto the OASIS online database of archaeological projects in Britain including the upload of a digital (PDF) copy of the final report, which will appear on the Archaeology Data Service (ADS) website once the OASIS record has been verified.

Public dissemination

In addition to the ADS website, a digital (PDF) copy of the final report will also be made available for public viewing via Cotswold Archaeology's *Archaeological Reports Online* web page, generally within 12 months of completion of the project (http://reports.cotswoldarchaeology.co.uk/).

Archive deposition

6.8 CA will make arrangements with the Carmarthenshire County Museum/RCAHMW for the deposition of the site archive and, subject to agreement with the legal landowner(s), the artefact collection. The Carmarthenshire County Museum/RCAHMW will be consulted at this stage concerning their requirements and notified in advance of the expected time limits for deposition of the archive.

7. HEALTH AND SAFETY

7.1 CA will conduct all works in accordance with the Health and Safety at Work Act 1974 and all subsequent Health and Safety legislation, CA Health and Safety and Environmental policies and the CA Safety, Health and Environmental Management System (SHE), as well as any Principal Contractor's policies or procedures. A site-

specific Construction Phase Plan (form SHE 017) will be formulated prior to commencement of fieldwork.

8. INSURANCES

8.1 CA holds Public Liability Insurance to a limit of £10,000,000 and Professional Indemnity Insurance to a limit of £10,000,000.

9. MONITORING

9.1 Notification of the start of site works will be made to Mike Ings (DAT) and Will Davies (RIAMA) so that there will be opportunities to visit the site and check on the quality and progress of the work.

10. QUALITY ASSURANCE

- 10.1 CA is a Registered Organisation (RO) with the Chartered Institute for Archaeologists (RO Ref. No. 8). As a RO, CA endorses the *Code of Conduct* (ClfA 2014) and the *Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology* (ClfA 2014). All CA Project Managers and Project Officers hold either full Member or Associate status within the ClfA.
- 10.2 CA operates an internal quality assurance system in the following manner. Projects are overseen by a Project Manager who is responsible for the quality of the project. The Project Manager reports to the Chief Executive who bears ultimate responsibility for the conduct of all CA operations. Matters of policy and corporate strategy are determined by the Board of Directors, and in cases of dispute recourse may be made to the Chairman of the Board.

11. PUBLIC ENGAGEMENT, PARTICIPATION AND BENEFIT

11.1 This project will not afford opportunities for public engagement or participation during the course of the fieldwork. However, the results will be made publicly available on the ADS and Cotswold Archaeology websites, as set out in Section 6 above, in due course.

12. STAFF TRAINING AND CPD

- 12.1 CA has a fully documented mandatory Performance Management system for all staff which reviews personal performance, identifies areas for improvement, sets targets and ensures the provision of appropriate training within CA's adopted training policy. In addition, CA has developed an award-winning Career Development Programme for its staff, which ensures a consistent and high quality approach to the development of appropriate skills.
- 12.2 As part of the company's requirement for Continuing Professional Development, all members of staff are also required to maintain a Personal Development Plan and an associated log which is reviewed within the Performance Management system. All staff are subject to probationary periods on appointment, with monthly review; for site-based staff additional monthly Employee Performance Evaluations measure and record skills and identify training needs.

13. REFERENCES

British Geological Survey (BGS), 2019, *Geology of Britain Viewer*http://maps.bgs.ac.uk/geology-viewer-google/googleviewer.html Accessed 15 April 2019

Cadw 2018. Managing Scheduled Monuments in Wales

- CA (Cotswold Archaeology) 1995. Treatment of finds immediately after excavation Technical Manual No. 3
- CA 2012. The taking and processing of environmental and other samples from archaeological sites Technical Manual No. 2
- CA 2013. Survey Manual Technical Manual No. 4
- CA 2017 Fieldwork Recording Manual, Technical Manual No. 1
- CA 2018, Former Police Station, Carmarthen, Carmarthenshire: Heritage Assessment, CA Report No. **18170**

- CA 2019 Carmarthen Police Station, Friars Park, Carmarthen, Carmarthenshire:

 Archaeological Evaluation and Strip, Map & Record. CA typescript report 6791.1
- ClfA (Chartered Institute for Archaeologists) 2014. Standard and Guidance for Historic Environment Desk-Based Assessment. Reading: Reading University Press
- Harrington, P. 1992, Archaeology of the English Civil War, Shire Publications Ltd
- Harrington, P. 2004, English Civil War Archaeology, B T Batsford
- James, T. 1991, 'Carmarthen's Civil War Defences. Discoveries at Carmarthen Greyfriars

 Excavations 1983-1990' in *The Carmarthenshire Antiquary XXVII*, The

 Carmarthenshire Antiquarian Society
- James, T. 1995, Excavations at Carmarthen Greyfriars 1983-1990
- Manning, A. 1998, Carmarthen Greyfriars, Carmarthen: the 1997 rescue excavations and watching brief on the site of the choir and area north of the friary, Cambria Archaeology
- O'Neill, B. H. St. J. 1938. The Bulwarks, Carmarthen, Archaeologia Cambrensis, 93
- Osborne, M. 2004, Sieges and Fortifications of the Civil Wars in Britain, Partizan Press

APPENDIX A: COTSWOLD ARCHAEOLOGY SPECIALISTS

Ceramics

Neolithic/Bronze Age Ed McSloy BA MCIFA (CA)

Emily Edwards (freelance)

Dr Elaine Morris BA PhD FSA MCIFA (University of Southampton)

Iron Age/Roman Ed McSloy BA MCIFA (CA)

Kayt Marter Brown BA MSc MCIFA (freelance)

(Samian) Gwladys Montell MA PhD (freelance)
(Amphorae stamps) Dr David Williams PhD FSA (freelance)

Anglo-Saxon Paul Blinkhorn BTech (freelance)

Dr Jane Timby BA PhD FSA MCIFA (freelance)

Medieval/post-medieval Ed McSloy BA MCIFA (CA)

Kayt Marter Brown BA MSc MCIFA (freelance)

Stephanie Ratkai BA (freelance) Paul Blinkhorn BTech (freelance) John Allan BA MPhil FSA (freelance)

South West Henrietta Quinnell BA FSA MCIFA (University of Exeter)

Clay tobacco pipe Reg Jackson MLitt MCIFA (freelance)

Marek Lewcun (freelance)

Ceramic Building Material Ed McSloy MCIFA (CA)

Dr Peter Warry PhD (freelance)

Other Finds

Small Finds Ed McSloy BA MCIFA (CA)

Metal Artefacts Katie Marsden BSc (CA)

Dr Jörn Schuster MA DPhil FSA MCIFA (freelance)

Dr Hilary Cool BA PhD FSA (freelance)

Lithics Ed McSloy BA MCIFA (CA)

Jacky Sommerville BSc MA PCIFA (CA)

(Palaeolithic) Dr Francis Wenban-Smith BA MA PhD (University of Southampton)

Worked Stone Dr Ruth Shaffrey BA PhD MCIFA (freelance)

Dr Kevin Hayward FSA BSc MSc PhD PCIFA (freelance)

Inscriptions Dr Roger Tomlin MA DPhil, FSA (Oxford)

Glass Ed McSloy MCIFA (CA)

Dr Hilary Cool BA PhD FSA (freelance)

Dr David Dungworth BA PhD (freelance; English Heritage)

Coins Ed McSloy BA MCIFA (CA)

Dr Peter Guest BA PhD FSA (Cardiff University)
Dr Richard Reece BSc PhD FSA (freelance)

Leather Quita Mould MA FSA (freelance)

Textiles Penelope Walton Rogers FSA Dip Acc. (freelance)

Iron slag/metal technology Dr Tim Young MA PhD (Cardiff University)

Dr David Starley BSc PhD

Worked wood Michael Bamforth BSc MCIFA (freelance)

Biological Remains

Animal bone Dr Philip Armitage MSc PhD MCIFA (freelance)

Dr Matilda Holmes BSc MSc ACIFA (freelance)

Human Bone Sharon Clough BA MSc MCIFA (CA)

Environmental sampling Sarah Wyles BA PCIFA (CA)

Sarah Cobain BSc MSc ACIFA (CA)

Dr Keith Wilkinson BSc PhD MCIFA (ARCA)

Pollen Dr Michael Grant BSc MSc PhD (University of Southampton)

Dr Rob Batchelor BSc MSc PhD MCIFA (QUEST, University of Reading)

Diatoms Dr Tom Hill BSc PhD CPLHE (Natural History Museum)

Dr Nigel Cameron BSc MSc PhD (University College London)

Charred Plant Remains Sarah Wyles BA PCIFA (CA)

Sarah Cobain BSc MSc ACIFA (CA)

Wood/Charcoal Sarah Cobain BSc MSc ACIFA(CA)

Dana Challinor MA (freelance)

Insects Enid Allison BSc D.Phil (Canterbury Archaeological Trust)

Dr David Smith MA PhD (University of Birmingham)

Mollusca Sarah Wyles BA PCIFA (CA)

Dr Keith Wilkinson BSc PhD MCIFA (ARCA)

Ostracods and Foraminifera Dr John Whittaker BSc PhD (freelance)

Fish bones Dr Philip Armitage MSc PhD MCIFA (freelance)

Geoarchaeology Dr Keith Wilkinson BSc PhD MCIFA (ARCA)

Soil micromorphology Dr Richard Macphail BSc MSc PhD (University College London)

Scientific Dating

Dendrochronology Robert Howard BA (NTRDL Nottingham)

Radiocarbon dating SUERC (East Kilbride, Scotland)

Beta Analytic (Florida, USA)

Archaeomagnetic dating Dr Cathy Batt BSc PhD (University of Bradford)

TL/OSL Dating Dr Phil Toms BSc PhD (University of Gloucestershire)

Conservation Karen Barker BSc (freelance)

Pieta Greaves BSc MSc ACR (Drakon Heritage and Conservation)

APPENDIX B: ARCHAEOLOGICAL STANDARDS AND GUIDELINES

- AAF 2007 Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation.

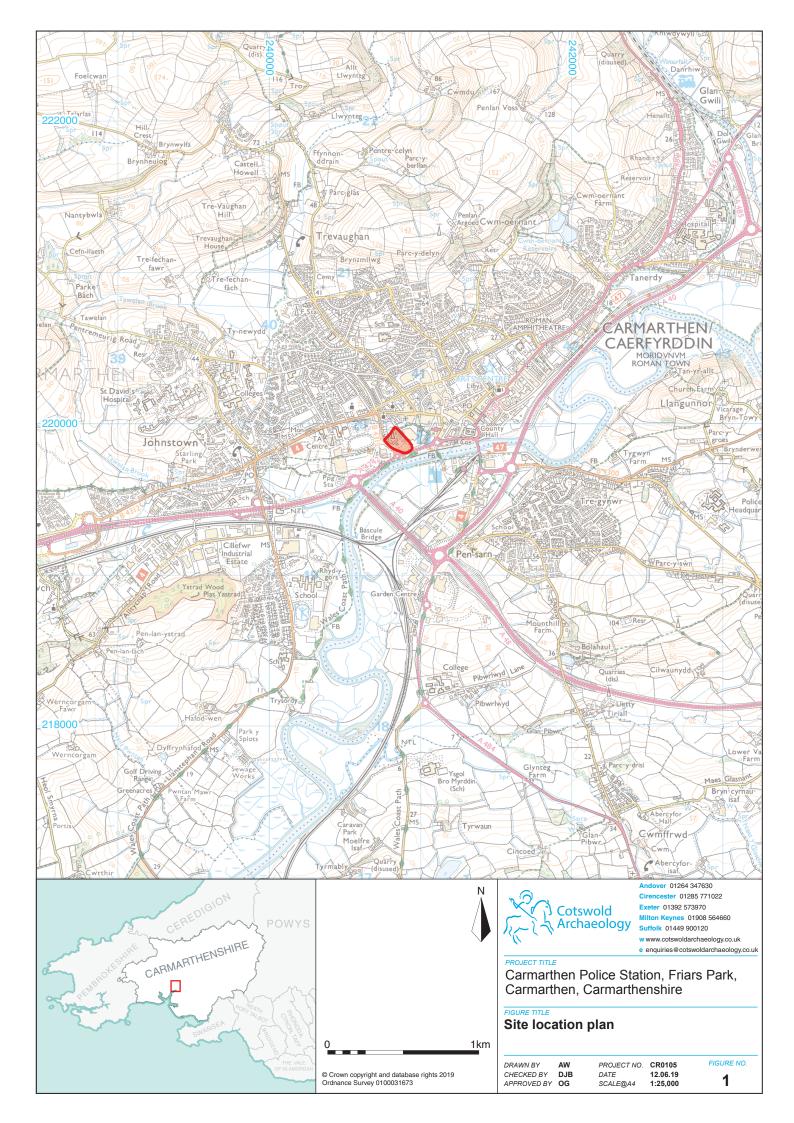
 Archaeological Archives Forum
- AAI&S 1988 The Illustration of Lithic Artifacts: A guide to drawing stone tools for specialist reports. Association of Archaeological Illustrators and Surveyors Paper 9
- AAI&S 1994 The Illustration of Wooden Artifacts: An Introduction and Guide to the Depiction of Wooden Objects.

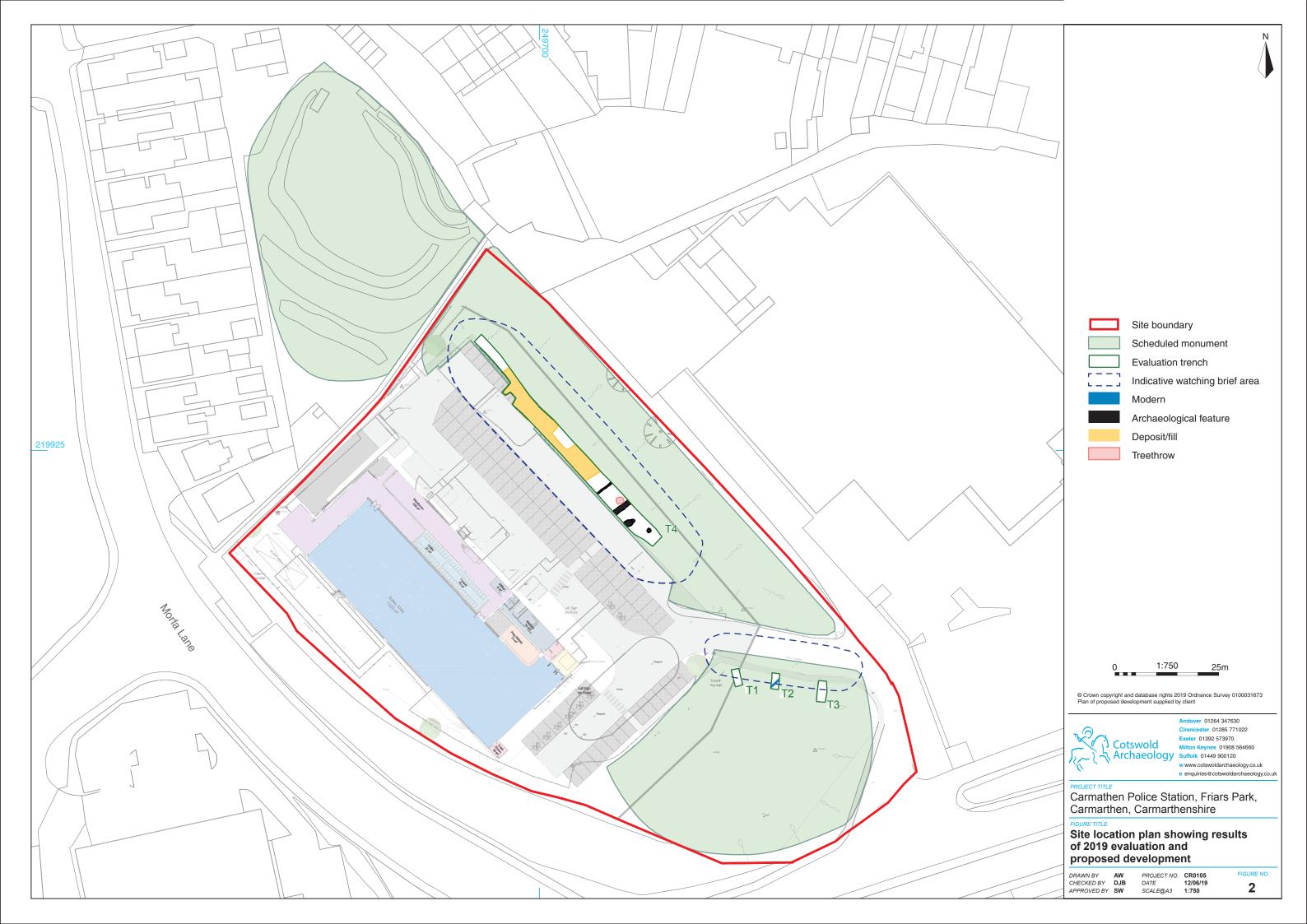
 Association of Archaeological Illustrators and Surveyors Paper 11
- AAI&S 1997. Aspects of Illustration: Prehistoric pottery. Association of Archaeological Illustrators and Surveyors Paper 13
- AAI&S nd *Introduction to Drawing Archaeological Pottery*. Association of Archaeological Illustrators and Surveyors, Graphic Archaeology Occasional Papers 1
- ACBMG 2004 Draft Minimum Standards for the Recovery, Analysis and Publication of Ceramic Building Material. (third edition) Archaeological Ceramic Building Materials Group
- AEA 1995 Environmental Archaeology and Archaeological Evaluations. Recommendations concerning the environmental archaeology component of archaeological evaluations in England. Working Papers of the Association for Environmental Archaeology No. 2
- BABAO and IFA, 2004 Guidelines to the Standards for Recording Human Remains. British Association for Biological Anthropology and Osteoarchaeology and Institute of Field Archaeologists. Institute of Field Archaeologists Technical Paper 7 (Reading)
- Barber, B., Carver, J., Hinton, P. and Nixon, T. 2008 Archaeology and development. A good practice guide to managing risk and maximising benefit. Construction Industry Research and Information Association Report C672
- Bayley, J. (ed) 1998 Science in Archaeology. An agenda for the future. English Heritage (London)
- Bewley, R., Donoghue, D., Gaffney, V., Van Leusen, M., Wise, M., 1998 Archiving Aerial Photography and Remote Sensing Data: A guide to good practice. Archaeology Data Service
- Blake, H. and P. Davey (eds) 1983 Guidelines for the processing and publication of Medieval pottery from excavations, report by a working party of the Medieval Pottery Research Group and the Department of the Environment. Directorate of Ancient Monuments and Historic Buildings Occasional Paper 5, 23-34, DoE, London
- Brickley, M. and McKinley, J.I., 2004 *Guidelines to the Standards for Recording Human Remains*. IFA Paper No 7,Institute of Field Archaeologists (Reading)
- Brickstock, R.J. 2004 The Production, Analysis and Standardisation of Romano-British Coin Reports. English Heritage (Swindon)
- Brown, A. and Perrin, K. 2000 A Model for the Description of Archaeological Archives. English Heritage Centre for Archaeology/ Institute of Field Archaeologists (Reading)
- Brown, D.H. 2007 Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation. IFA Archaeological Archives Forum (Reading)
- Buikstra, J.E. and Ubelaker D.H. (eds) 1994 Standards for Data Collection from Human Skeletal Remains. (Fayetteville, Arkansas)
- ClfA, 2014, Code of Approved Practice for the Regulation of Contractual Arrangements in Field
- Archaeology. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Desk-based Assessment. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Watching Brief. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Excavation. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Investigation and Recording of Standing Buildings or Structures. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for the Creation, Compilation, Transfer and Deposition of
- Archaeological Archives. Chartered Institute for Archaeologists (Reading)
- ClfA, 2014, Standard and Guidance for Archaeological Field Evaluation. Chartered Institute for Archaeologists (Reading)
- Clark, J., Darlington, J. and Fairclough, G. 2004 Using Historic Landscape Characterisation. English Heritage (London)
- Coles, J.M., 1990 Waterlogged Wood: guidelines on the recording, sampling, conservation and curation of structural wood. English Heritage (London)
- Cowton, J., 1997 Spectrum. The UK Museums Documentation Standard. Second edition. Museums Documentation Association
- Cox, M., 2002 Crypt Archaeology: an approach. Institute of Field Archaeologists Technical Paper 3 (Reading)
- Darvill, T. and Atkins, M., 1991 Regulating Archaeological Works by Contract. IFA Technical Paper No 8, Institute of Field Archaeologists (Reading)

- Davey P.J. 1981 Guidelines for the processing and publication of clay pipes from excavations. Medieval and Later Pottery in Wales, IV, 65-87
- Eiteljorg, H., Fernie, K., Huggett, J. and Robinson, D. 2002 CAD: A guide to good practice. Archaeology Data Service (York)
- EA 2005 Guidance on Assessing the Risk Posed by Land Contamination and its Remediation on Archaeological Resource Management. English Heritage/ Environment Agency Science Report P5-077/SR (Bristol)
- EH 1995 A Strategy for the Care and Investigation of Finds. English Heritage Ancient Monuments Laboratory (London)
- EH 1998 Identifying and Protecting Palaeolithic Remains. Archaeological guidance for planning authorities and developers. English Heritage (London)
- EH 1999 Guidelines for the Conservation of Textiles. English Heritage (London)
- EH 2000, Managing Lithic Scatters. Archaeological guidance for planning authorities and developers. English Heritage (London)
- EH 2002 With Alidade and Tape: graphical and plane table survey of archaeological earthworks. English Heritage (Swindon)
- EH 2003a Where on Earth Are We? The Global Positioning System (GPS) in archaeological field survey. English Heritage (London)
- EH 2003b Twentieth-Century Military Sites. Current approaches to their recording and conservation English Heritage (Swindon)
- EH 2004a Dendrochronology. Guidelines on producing and interpreting dendrochronological dates. English Heritage (Swindon)
- EH 2004b Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical report. English Heritage Centre for Archaeology Guidelines
- EH 2006a Guidelines on the X-radiography of Archaeological Metalwork. English Heritage (Swindon)
- EH 2006b Archaeomagnetic Dating. English Heritage (Swindon)
- EH 2006c Science for Historic Industries: Guidelines for the investigation of 17th- to 19th-century industries. English Heritage (Swindon)
- EH 2007a Understanding the Archaeology of Landscapes. A guide to good recording practice. English Heritage (Swindon)
- EH 2007b Geoarchaeology. Using earth sciences to understand the archaeological record. (London)
- EH 2008a Luminescence Dating. Guidelines on using luminescence dating in archaeology. English Heritage (Swindon)
- EH 2008b Geophysical Survey in Archaeological Field Evaluation. English Heritage Research and Professional Services Guidelines No 1 (second edition). English Heritage (Swindon)
- EH 2008c Research and Conservation Framework for the British Palaeolithic. English Heritage/Prehistoric Society (Swindon)
- EH 2008d Investigative Conservation. Guidelines on how the detailed examination of artefacts from archaeological sites can shed light on their manufacture and use. English Heritage (Swindon)
- EH 2010 Waterlogged Wood: Guidelines on the recording, sampling, conservation and curation of archaeological wood. English Heritage (London)
- EH 2011 Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation. English Heritage Centre for Archaeology Guidelines (London)
- EH 2012, Guidelines for the Care of Waterlogged Organic Artefacts: guidelines on their recovery, analysis and conservation.
- EH 2014 Our Portable Past: a statement of English Heritage policy and good practice for portable antiquities/surface collected material in the context of field archaeology and survey programmes (including the use of metal detectors). English Heritage (Swindon)
- EH and Church of England, 2005, Guidance for Best Practice for Treatment of Human Remains Excavated from Christian Burial Grounds in England. English Heritage (London)
- Ferguson, L. and Murray, D., 1997, Archaeological Documentary Archives. IFA Paper 1, Institute of Field Archaeologists (Reading)
- Gaffney, C. and Gater, J., with Ovenden, S., 2002, *The Use of Geophysical Techniques in Archaeological Evaluations*. IFA Technical Paper 9, Institute of Field Archaeologists (Reading)
- Gillings, M. and Wise, A., 1999, GIS: A guide to good practice. Archaeology Data Service (York)
- Gurney, D.A., 1985, Phosphate Analysis of Soils: A Guide for the Field Archaeologist. IFA Technical Paper 3, Institute of Field Archaeologists (Reading)
- HE 2015a Archaeometallurgy: Guidelines for Best Practice. Historic England (Swindon)
- HE 2015b (revised 2008), Metric Survey Specifications for Cultural Heritage. Historic England (Swindon)
- HE 2015c Management of Research Projects in the Historic Environment. The MoRPHE Project Managers' Guide. Historic England (Swindon)
- Handley, M., 1999, *Microfilming Archaeological Archives*. IFA Technical Paper 2, Institute of Field Archaeologists (Reading)
- Mays, S., 1991, Recommendations for Processing Human Bone from Archaeological Sites. Ancient Monuments Lab Report 124/91 (London)
- Mays, S., Brickley, M. and Dodwell, N., 2002, *Human Bones from Archaeological Sites. Guidelines for Producing Assessment Documents and Analytical Reports.* Centre for Archaeology Guidelines, English Heritage (Portsmouth)

- McKinley, J.I. and Roberts, C., 1993, Excavation and Post-excavation Treatment of Cremated and Inhumed Human Remains. Institute of Field Archaeologists Technical Paper No. 13 (Reading)
- MGC, 1992, Standards in the Museum Care of Archaeological Collections. Museums and Galleries Commission Murphy, P.L. and Wiltshire, P.E.J. 1994, A Guide to Sampling Archaeological Deposits for Environmental Analysis. English Heritage (London)
- MPRG 2000, A Guide to the Classification of Medieval Ceramics. Medieval Pottery Research Group Occasional Papers No. 1.
- MPRG 2001, Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics. Medieval Pottery Research Group
- Owen, J., 1995, Towards an Accessible Archaeological Archive. The Transfer of archaeological archives to museums: guidelines for use in England, Northern Ireland, Scotland and Wales. Society of Museum Archaeologists
- PCRG 1997, The Study of Later Prehistoric Pottery: General polices and guidelines for analysis and publication.

 Prehistoric Ceramics Research Group Occasional Paper 12
- Philo, C. and Swann, A., 1992, *Preparation of Artwork for Publication*. Institute of Field Archaeologists Technical Paper No. 10 (Reading)
- RCHME 1999, Recording Archaeological Field Monuments: A descriptive specification. RCHME (Swindon)
- RCHME 2007, MIDAS: A manual and data standard for monuments inventories. RCHME (Swindon)
- Schofield, A J, (ed) 1998, Interpreting Artefact Scatters. Oxbow Monograph 4 (Oxford)
- Richards, J. and Robinson, D. (eds), 2001, Digital Archives From Excavation and Fieldwork: A guide to good practice. Archaeology Data Service
- Robinson, W., 1998, First Aid for Underwater Finds. Archetype Books (London)
- RFG and FRG, 1993, Guidelines for the Preparation of Site and Assessments for all Finds other than Fired Clay Vessels. Roman Finds Group And Finds Research Group
- Schmidt, A., 2001, Geophysical Data in Archaeology: A guide to good practice. Archaeology Data Service
- SGRP, 1994, Guidelines for the Archiving of Roman Pottery. Study Group for Roman Pottery
- SMA, 1993, Guidelines on the Selection, Retention and Dispersal of Archaeological Collections. Society of Museum Archaeologists
- UKIC, 1983, Packaging and Štorage of Freshly Excavated Artefacts from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 2)
- UKIC, 1984, Environmental Standards for Permanent Storage of Excavated material from Archaeological Sites. (United Kingdom Institute for Conservation, Conservation Guidelines No 3)
- UKIC, 1990, Guidance for Conservation Practice. United Kingdom Institute for Conservation
- UKIC, 1990, Guidelines for the Preparation of Excavation Archives for Long-term Storage. United Kingdom Institute for Conservation Archaeology Section
- UKIC, 2001, Excavated Artefacts and Conservation. (United Kingdom Institute for Conservation,
- Conservation Guidelines No 1, revised)
- Watkinson, D.E., and Neal, V., 1998, First Aid for Finds. (3rd edition) RESCUE/United Kingdom Institute for Conservation, Archaeology Section and Museum of London
- Willis, S., 1997, (ed) Research Frameworks for the Study of Roman Pottery. Study Group for Roman Pottery
- World Archaeology Congress 1989, *The Vermillion Accord Human Remains*. Motion Approved at the First Inter-Congress on the Disposal of the Dead (Vermillion)
- Young C., 1980, Guidelines for the Processing and Publication of Roman Pottery. Department of the Environment







Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 1, Clyst Units Cofton Road Marsh Barton Exeter EX2 8QW

t: 01392 573970

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive, Stonebridge Milton Keynes Buckinghamshire MK13 0AT

t: 01908 564660

Suffolk Office

Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ

t: 01449 900120

e: enquiries@cotswoldarchaeology.co.uk



APPENDIX D: SCHEDULED MONUMENT CONSENT



Plas Carew, Uned 5/7 Cefn Coed Parc Nantgarw, Caerdydd CF15 7QQ Ffôn 0300 025 6000 ebost cadw@llyw.cymru www.cadw.gov.wales Plas Carew, Unit 5/7 Cefn Coed Parc Nantgarw, Cardiff CF15 7QQ Tel 0300 025 6000 email cadw@gov.wales www.cadw.gov.wales

Wendy Hurst Lidl UK GmbH Waterton Industrial Estate, Cowbridge Road, Bridgend CF31 3PH Eich cyfeirnod Your reference

Ein cyfeirnod Our reference CM009

Dyddiad 21 June 2019 Date

Llinell uniongyrchol Direct line

03000 256005

Ebost Matthew.coward@gov.wales Email:

Dear Ms Hurst,

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 APPLICATION FOR SCHEDULED MONUMENT CONSENT THE BULWARKS (CIVIL WAR), CARMARTHEN

1. Introduction

- 1.1 Thank you for your application of 18 May 2018 for scheduled monument consent to widen the existing access road from 5m to almost 9m, provide up to 26 car parking spaces and landscape part of the scheduled monument known as The Bulwarks (Civil War), Carmarthen. I note that this application relates to those works that physically impact on the scheduled monument and that the corresponding application for planning permission for the wider scheme including, for example, the construction of the main store and the provision of loading and storage facilities is currently with Carmarthenshire County Council for determination. Our outstanding comments to the Council as a statutory consultee on the planning application will be sent shortly and will, of course, be consistent with this decision.
- 1.2 Each application for scheduled monument consent is considered on its own merits in accordance with *Conservation Principles for the Sustainable Management of the Historic Environment in Wales* (Conservation Principles) and Annex A of *Technical Advice Note 24:* The Historic Environment (TAN 24). In particular, TAN 24 explains that the main purpose of scheduling is to ensure the preservation of ancient monuments and, when considering an application for scheduled monument consent, there is a presumption against proposals which would involve significant alteration or cause damage or which would have a significant impact on the setting of remains.

2. Assessment

2.1 Your application and the supporting documentation has been assessed by our Regional Inspector of Ancient Monuments who has recommended that conditional scheduled monument consent should be approved for the elements of the application relating to the proposed car parking and the access road. However, he

Mae Gwasanaeth Amgylchedd Hanesyddol Llywodraeth Cymru (Cadw) yn hyrwyddo gwaith cadwraeth ar gyfer amgylchedd hanesyddol Cymru a gwerthfawrogiad ohono.







has recommended that scheduled monument consent should be refused for the elements of the application relating to landscaping and planting. The reasons for the Inspector's conclusions are set out in Annex A of this letter.

- 2.2 I have carefully considered the impact of the proposed development on the scheduled monument and its setting in light of the advice that I have received from Cadw's Regional Inspector of Ancient Monuments. I have also very carefully considered the objections that we have received from Carmarthen Civic Society and two members of the public.
- 2.3 After very careful consideration I have no reason to disagree with the advice of our Regional Inspector and am satisfied that his recommendation is consistent with the objectives of Conservation Principles and TAN 24.

3. Decision

- 3.1 Accordingly, I hereby approve conditional scheduled monument consent for the proposed widening of the access road but at a reduced width as set out in the below conditions, and for the provision of car parking spaces along the south-western side of the scheduled monument. However, I hereby refuse scheduled monument consent for the proposed landscaping and planting. As I have mentioned previously, I have no reason to disagree with the advice of our Regional Inspector and the rationale for my decision is therefore explained in Annex A.
- 3.2 In reaching this decision, I have taken into account the requirement of sections 3 and 5 of the Wellbeing of Future Generations Act 2015. I consider that this decision is in accordance with the Act's sustainable development principle through its contribution towards the Welsh Ministers well-being objective of *A Wales of vibrant culture and thriving Welsh Language*.
- 3.3 The development control issues associated with the wider development are subject to the application for planning permission and it is the responsibility of the applicant to establish whether any further approval or consents are required for the proposed development.

4. Conditions

- 4.1 The proposed conditions are intended to protect the monument from damage or significant alteration as set out in *TAN 24 : The Historic Environment.*
- 4.2 The applicant shall afford access at all reasonable times to any Cadw official or archaeologist nominated by Cadw to monitor progress of the works. Cadw shall be given two weeks written notice (e-mail notification is acceptable) in order for its representatives to monitor on site activity.
- 4.3 With the exception of the required adjustments and alterations set out in later conditions, works shall be carried out strictly in accordance with the following approved plans and documents listed below. No variations from these plans and documents are permitted unless they have been authorised in advance in writing by Cadw.

Number	Document / plan	Reference (where applicable)	Date
1	Application for scheduled monument consent signed by Wendy Hurst		18/05/2018
2.	Cotswold Archaeology Heritage Assessment (updated)	Cotswold Archaeology report 18170	23/05/2018
3	Advice note on amended layout	CA 6579	20/12/2018
4	Cotswold Archaeology information provided with amended class 7 request (Car park layout)	CA drawing 6579	25/03/2019
5	Typical external works details (car park)	SP-04	26/03/2019
6	Cotswold Archaeology Evaluation Report (revised)	CA Report 6791-1	15/05/2019
7	Site plan, latest version	5872BR 00 00 DRA 900100	05/17/2019
8	Landscape proposals plan	173-2018./83 Rev H	09/2018
9	Landscape methodology and 5 year aftercare	2 nd February 2019	02/02/2019

- 4.4 The area of the car park extension within the scheduled area shall be surfaced with grasscrete or some similar sympathetic surface to reduce the aesthetic impact of the car park on the monument. Cadw must approve in advance a material proposed by the applicant.
- 4.5 The hoop barriers at the edge of the car parking area shall be located within the footprint of the previously evaluated area and not within previously undisturbed ground within the scheduled area unless agreed otherwise with Cadw.
- 4.6 The widening of the access road shall be reduced by a width of 1m adjacent to evaluation Trench 2 in order to avoid impact on archaeological deposits observed at the northern end of the trench, any continuation of these to the north and the crest of the upstanding northern bank of southern bastion. Cadw must agree in writing the east-west extent of the proposed reduction.
- 4.7 No signs, posts, barriers or any other related furniture shall be located within the scheduled area unless otherwise approved in writing by Cadw.

- 4.8 There shall be no planting of trees, shrubs or hedges within the scheduled area as set out in the Landscape Proposals document.
- 4.9 No ground-disturbing landscaping measures (scarification, cultivation) shall be undertaken within the scheduled area.
- 4.10 Temporary fencing shall be erected to protect all areas of the monument unaffected by the proposed development during the course of works. This shall not disturb the ground in any way (i.e. Herras fencing or some similar product supported on concrete feet).
- 4.11 There shall be no vehicle or machine tracking, parking or the storage of materials within the scheduled areas during the course of works.
- 4.12 No works, including site clearance, shall commence until Cadw has been informed in writing of the name of an appropriately qualified and experienced archaeological contractor who is to be present during the undertaking of any outstanding excavations within the scheduled area so that a watching brief can be conducted.
- 4.13 No works shall commence until Cadw has approved a Written Scheme of Investigation (WSI) for the watching brief. A digital copy of the watching brief report shall be submitted to Cadw for approval within one month of the archaeological fieldwork being completed.
- 4.14 All staff, contractors and subcontractors shall be given a 'toolbox talk' at the start of works by the appointed project archaeologist on the scheduled status of the site and the sensitivities and restrictions that apply.
- 4.15 Cadw's representative shall be invited to attend a start of works site meeting to review the programme, submitted method statement and arrangements that have been established for archaeological mitigation. This meeting will also establish an appropriate monitoring regime for the duration of the project.
- 4.16 Any historic or archaeological features (not previously identified) which are revealed when carrying out the works shall be retained *in-situ* and reported to Cadw within two working days. Works shall be halted in the area/part of the site affected until provision has been made for retention and/or recording of the feature by a suitably qualified archaeologist in accordance with details submitted to and approved in writing in advance by Cadw.
- 4.17 The applicant shall discuss with Cadw opportunities for site interpretation to inform shoppers and visitors of the monument's significance. Cadw would be pleased to provide advice on the content of any such interpretation and must approve its location.

5. Compliance

- 5.1 Where a condition requires approval or any contact with Cadw you are advised to contact Will Davies, Cadw's Regional Inspector of Ancient Monuments by email Will.Davies@gov.wales or by telephone on 03000 258010.
- 5.2 Section 2(6) of the 1979 Act provides that non-compliance with a condition attached to a grant of scheduled monument consent shall be an offence.
- 5.3 By virtue of Section 4 of the 1979 Act if no works to which this consent relates are executed or started within 5 years from the date of this letter, the consent shall cease to have effect at the end of that period (unless it is revoked in the meantime).
- 5.4 This letter does not convey any approval or consent required under any enactment, bylaw, order or regulation other than Section 2 of the Ancient Monuments and Archaeological Areas Act 1979. It is the responsibility of the applicant to obtain any such approval or consent where necessary.

6. **Mechanism for Challenge**

- 6.1 Section 55 of the 1979 Act explains that if you are aggrieved by the decision given in this letter, you may challenge its validity by applying to the High Court within six weeks from the date of my decision. Furthermore, the legislation explains that the grounds on which an application may be made to the Court are:
 - a) that my decision is not within the powers of the Act (ie that I have exceeded the powers available under the Act); and
 - b) that any of the relevant requirements set out in the Act have not been complied with and that your interest has been substantially prejudiced by the failure to comply.

The "relevant requirements" mentioned above are defined in Section 55 of the 1979 Act and it is advisable to seek legal advice before taking any action.

- 6.2 Should you have any queries please do not hesitate to contact me.
- 6.3 Finally, please note that your personal data is managed in compliance with the <u>General Data Protection Regulations.</u>

Yours sincerely,

Matthew Coward

Senior Heritage Planning and Designations Manager Signed under authority of the Deputy Minister for Culture, Sport and Tourism,

one of the Welsh Ministers

WARD WELLOW

ANCIENT MONUMENTS AND ARCHAEOLOGICAL AREAS ACT 1979 APPLICATION FOR SCHEDULED MONUMENT CONSENT THE BULWARKS (CIVIL WAR), CARMARTHEN

INSPECTOR'S ADVICE

1. Policy Context

- 1.1 Technical Advice Note 24: The Historic Environment explains that the main purpose of scheduling is to ensure the preservation of ancient monuments and there is a presumption in favour of their physical preservation when considering an application for scheduled monument consent. This means that there is a presumption against proposals which would involve significant alteration or cause damage, or which would have a significant impact on the setting of remains. Therefore, applicants are expected to demonstrate that no practicable alternative route or location, avoiding the scheduled area, exists and that the need to undertake works outweighs the presumption in favour of the protection of the scheduled monument.
- 1.2 The Welsh Government's six principles for sustainable management of the historic environment in Wales are also used as a guide when considering applications for scheduled monument consent. These are:
- Historic assets will be managed to sustain their values.
- Understanding the significance of historic assets is vital.
- The historic environment is a shared resource.
- Everyone will be able to participate in sustaining the historic environment.
- Decisions about change must be reasonable, transparent and consistent.
- Documenting and learning from decisions is essential.

2. The Bulwarks (Civil War), Carmarthen

2.1 The monument comprises the sole remains of extensive earthwork defences dating to the Civil War, (1642-51), built to protect Royalist held Carmarthen. These consist of low, broad banks and ditches with projecting earthen bastions to the NW and SE, designed to fire from and absorb the shock of artillery fire. They faced west directly into the development site where a central section of bank survives to a height of c 0.7m fronted to the west by a ditch c 1.6m deep externally and 2.3m below the crest of the bank. North and south of this are the two polygonal projecting bastions of which only the northern is well preserved, with the depth of the ditch being c 2m below the exterior and 4m below the crest of the now slight bank. The central bank and southern bastion now lie within the grounds of the former police facility, where they have been well maintained as grassed areas.

3. The Application

- 3.1 The application for scheduled monument consent involves (i) widening an existing access road into the scheduled monument, (ii) providing up to 26 car parking spaces on the monument including hooped fence barriers between the new spaces and the monument and (iii) landscaping including two small plant beds.
- 3.2 The works form part of a wider proposal to construct a store, loading and storage facilities, other ancillary structures and associated car parking and access improvements to replace the existing police headquarters and its outbuildings. We are commenting separately to the local planning authority on the corresponding application for planning permission.

4. Background

- 4.1 The applicant's initial Heritage Assessment produced by Cotswold Archaeology was unsubstantiated with detailed evidence to support the assertion that the 'boundary had already been encroached by the existent road and sidewalks for the development of the former Police Station and the widening of the road, as it is, is not likely to result in any further intrusive effects'. Due to the lack of supporting evidence we agreed to an archaeological evaluation being undertaken.
- 4.2 The scheme was subsequently revised in response to our concerns about the impact of the proposed development on the setting of the monument. The resultant redesign saw the movement of the proposed main building away from the edge of the scheduled area to the opposite (south-western) side of the development site. This then required the relocation of up to 26 car parking spaces extending some 5m into a strip of land running inside the south-western edge of the scheduled area (in front of the ditch to the main rampart). I note that this element of the scheme is explored in Cotswold Archaeology's 'Advice note on Amended Layout' (CA6579).
- 4.3 The construction of the proposed parking spaces into the scheduled area involves relatively shallow ground disturbance and no significant alteration of ground levels in front of the monument and a limited previous evaluation of the footprint of a demolished ancillary structure at the northern end of this area indicated modern debris to just below the turf layer. We therefore agreed for the archaeological evaluation associated with the road widening to be include a strip, map and record exercise for the full length of the area of the proposed car parking in order to inform the decision on the application for scheduled monument consent.

5. Archaeological Evaluation

Design and Rationale

- 5.1 The brief and subsequent Written Scheme of Evaluation (WSI) for the archaeological evaluation of the car parking area and widening of the access road are summarised in this section of my report.
- 5.2 Access Road (Trenches 1-3) the rationale for the widening of the road into the scheduled area of the southern bastion was that the earthwork had already been

substantially levelled at this point, the applicant drew attention to existing cable runs crossing the earthworks at the level of the present access road, indicating additional sub-surface disturbance. The presence of services precluded a standard area evaluation of this strip and it was therefore agreed to evaluate the break of slope of the adjacent bank of the earthwork with three small trenches. These were excavated as specified onto the topmost archaeological layer, natural or a maximum depth of 1.2m, whichever was encountered first. We agreed to an excavation of three trenches rather than an area strip in order to avoid disturbing more earthwork bank than was necessary.

5.3 Car Parking (Trench 4) - this area was subject to a strip, map and record exercise, the turf and topsoil being removed by machine under constant supervision to the topmost archaeological layer, natural or the required depth, whichever was encountered first. The required depth of excavation varied with a slight N-S slope from a maximum of 0.8m to the north to some 0.5m at the southern end where several minor archaeological features were identified. The area evaluated was closer to the earthwork than indicated on the WSI due to the presence of the existing tarmac car park to the police station. Whilst the north eastern side of this trench was located less than 2m from the edge of the bank this presented no threat to any buried archaeology, the methodology being to stop as soon as any archaeological levels were encountered.

Results

- 5.4 The evaluations were monitored by Louise Mees, Cadw and me when the trenches had been opened to their full extent. The results are set out in Cotswold Archaeology report no. 6971-1 (May 2019) and are summarised below.
- 5.5 Access Road (Trenches 1-3) the three trenches revealed extensive modern disturbance, probably associated with the construction of the car park and access road. Trench 3 downhill to the east contained only modern made-up ground. The central of the three trenches (2) revealed a deposit (201) cut into natural substrate (202) which contained material broadly contemporary with the monument and likely to be related to its construction or use. This deepened or sloped downwards towards the southern end of the trench but was not visible in the northern elevation towards the proposed widening of the road. Whilst the exact relationship of this deposit to the earthwork is unclear Trench 2 has clearly indicated the presence of archaeology associated with the monument. An apparently re-deposited natural deposit (101) in Trench 1 is also likely to be related to construction of the southern bastion. This extended beyond the confines of the trench to the north. Although the exact relationship of the deposit to the monument is unclear, Trench 2 has confirmed the presence of related archaeology, potentially extending northwards into the area affected by the proposed road widening.
- 5.6 Car Parking (Trench 4) in spite of its proximity to the outer lip of the ditch of the monument, Trench 4 revealed no signs of a counterscarp, any former extension of the ditch to the south-west or any other outworks deposits associated with the Bulwarks. Abundant modern material within both topsoil and a considerable depth of subsoil indicated extensive modern disturbance across this area, probably associated with the construction of the police station. A series of pits and linear

features were identified and investigated at the southern end of the trench. Of these, two shallow gullies (405, 413) running beyond the confines of the trench towards the ditch to the north-east are undated but are likely to pre-date the Bulwarks, the report presenting the likely conclusion that they may be agricultural features or boundaries. I agree with the conclusion that several small undated pits in this area are likely, from their profile or the nature of their fills, to be of modern or natural origin. No archaeological levels were encountered at the northern end of the trench, which was excavated to below the level that would be affected by the construction of the car park. The earlier gullies with protected with geotextile to protect them during any future construction works.

6. Assessment

6.1 My advice relates solely to the direct physical and aesthetic (visual and setting) impacts of the elements of the scheme that fall within the scheduled area (ie the widening of the access road, the car parking spaces to the north-west and landscaping). Setting issues associated with the broader scheme have also been subject to separate comment to Carmarthenshire County Council in response to its consultation on the application for planning permission. The views below are based upon the results of the Cotswold Archaeology Heritage Impact Assessment and Archaeological Evaluation reports, and Cadw's inspection of the open evaluation trenches, taking into account additional comments made by Carmarthen Civic Society and other members of the public. I have also assessed the potential impacts of the different elements of the scheme against conservation values (evidential, historical, aesthetic and communal) set out in Conservation Principles (Cadw, 2011).

Historical Values

6.2 In my view the proposed scheme will have no impact on the historical value of the monument, which will remain unchanged.

Evidential Values

- 6.3 Access road and southern bastion the main evidential values of the southern bastion are in its rare survival, buried archaeology and overall relationship to the other extant elements of the monument rather than its present truncated and altered form. It has been separated from the rampart to the north by the existing access road to the site, the construction of which has substantially levelled the junction between the two earthworks obscuring their exact relationship and layout. Near the base of the road cutting on what now forms the lower northern slopes of the southern bastion, a service run cuts through the earthwork and is likely to have destroyed any vestigial remains of the monument on this line.
- 6.4 These services and the pavement at road level prevented evaluation of the exact strip affected by the proposed road widening. However, Trenches 1 and 2 on the crest of the adjacent bank immediately to the south have confirmed the presence of archaeological deposits likely to be associated with the construction or use of the southern bastion. Of these, only the northern edge of Trench 2 is to be marginally cut by the proposed widening, which could potentially impact on any vestigial continuation of deposit 201 to the north, although the section shows this deposit

deepening in the opposite direction. Re-deposited natural material in Trench 1 extended northwards towards the affected area, albeit several metres away and in an almost level area where relatively limited landscaping is required. In contrast, uniformly modern material in Trench 3 has clearly demonstrated that no significant archaeological deposits are likely to be affected by the widening of the road to the east.

- 6.5 The existing breach for the access road, the service run on its southern side, modern build up in Trench 3 and the orientation away from the breach of deposit 201 in Trench 2 indicate extensive modern disturbance in this area and that the present profile of the bank does not reflect the original form of the bastion.
- 6.6 The proposed road widening is therefore unlikely to affect any significant in situ archaeological deposits on the line of the existing road and service run but there is some potential for a continuation of deposit 201, or related deposits at the northern extremity of Trench 2, on the slope between the trench and the service run. This can be avoided by reducing the limit of road widening by 1m to the north of this trench. The applicant will need to agree in writing with us the east-west extent of this reduction. Any minor impacts on vestigial remains nearer the base of the existing breach can be mitigated by an archaeological watching brief on all outstanding ground disturbing works in this area.
- 6.7 The impact of the proposed widening on the overall layout of the site also needs to be considered. In addition to the aesthetic impact (see below) of further separating the southern bastion from the rest of the monument, this proposal will potentially further obscure the form of the bastion. However, the existing breach, service run and evidence from the three evaluation trenches indicates that its present profile is a modern one. In my view, if mitigated by a slight adjustment to avoid the northern end of Trench 2 such changes will be incremental and will not affect any understanding of the overall layout or form of the monument.
- 6.8 Car Parking the area affected by the proposed car parking forms almost level ground, sloping very slightly from north to south, a few metres to the south-west of the ditch to the main rampart. This is on a level with the existing police station car park and it has been presumed that this partly open, relatively flat area generally corresponds to the original Civil War topography of the site forming a field of fire outside of the defences.
- 6.9 Evaluation Trench 4 extended the length of the affected area, offset towards the ditch due to the existing tarmac surface. A consistent layer of modern disturbance or landscaped soil visible for the full N-S length of the trench was shown by the east to west (short) sections to extend away from the edge of the ditch at a consistent level. There was no evidence of a counterscarp bank or of any other earthworks or features associated with the construction or use of the monument (presumably the result of landscaping associated with the creation of the present car park). The undated early features identified in the base of the trench have been marked and protected by geotextile and will not be physically affected. I am therefore satisfied that no significant buried archaeological features or deposits will be affected by the construction of the car park.

- 6.10 Claims by third parties that the car park will destroy vestiges of a counterscarp bank and other upstanding earthwork remains associated with the monument also need to be addressed. The evaluation trench has comprehensively demonstrated that no such remains have survived, the present topography of the monument and the open space retained in front of it being the product of modern landscaping. The level of the open ground in front of the monument will not be significantly changed by the introduction of the parking area, although it will be altered aesthetically from grass to a parking surface (see below).
- 6.11 In my view the proposed parking area will therefore have a negligible impact on the evidential value of the monument. I recommend that any outstanding interventions into this area are covered by a watching brief.
- 6.12 *Hoop barriers* A series of low hoop barriers are proposed to define the boundary between the north-eastern edge of the car park extension and the monument and prevent parking on the earthwork. These have the potential to further impact upon the scheduled monument and should be located within the strip already evaluated and not into undisturbed ground.
- 6.13 Landscaping The Landscape Methodology document mentions, but does not take into account, the archaeological sensitivities of the earthworks of the scheduled monument, which are referred to as 'the relatively flat area facing A4242' (southern bastion) and 'the east dipped area between the building and the treeblock' (main rampart). It includes a proposal for a series of 2m wide, scarified and cultivated strips running along the grassed earthworks of the main rampart and ditch and across the southern bastion. These are to be refilled with soil and reseeded.
- 6.14 I consider that this method is entirely unnecessary for an area already maintained as grass and will entail additional ground disturbance/damage to the archaeologically sensitive surface of the earthworks. I further consider that this element of the proposal is inappropriate for a scheduled monument and consent should not be given. I do however welcome the forward plan for the regular mowing and maintenance of the monument presented in the same document. Those responsible for the monument should establish contact with Cadw as we would be pleased to provide advice about the future management of the monument.
- 6.15 *Planting* the landscape plans show a small area of planted beds at the north western end of the scheduled area and hedging adjacent to the southern bastion. These will potentially damage any previously unexplored sub-surface archaeological deposits through cultivation and root damage, and interrupt the open ground in front of, and views towards, the monument from the car park. There should be no such encroachment into the scheduled monument and no planting should be permitted.
- 6.16 Signage plans show a 'totem' style sign within the scheduled area on the north-western corner of the southern bastion and this element of work has been withdrawn from the application and should not therefore be approved.

Aesthetic Values

- 6.17 Access Road the issues here are primarily twofold. Firstly, the widening of the access road to the south by over 3m will increase the existing modern breach in the earthworks of the monument, creating a greater visual divide between the upstanding earthworks of the southern bastion and the main rampart. Secondly, it will also alter the existing profile of the northern bank of the bastion.
- 6.18 However, other than its overall location and scale it is generally accepted that the southern bastion has been considerably altered since it was first recorded, probably during the construction of the police headquarters. The road cutting, the service run through the lower slopes of the earthwork and the evidence from the archaeological evaluation have demonstrated that the present form of the northern bank of the bastion is the result of previous landscaping, its exact original line and profile being unknown.
- 6.19 The road widening will result in a change to the present appearance of this area of the monument but in my view this will be an incremental and localised change and will have a minor adverse impact on its aesthetic value. As such it will not significantly alter the overall form of the bastion or the layout of the monument as a whole, and will simply result in the replacement of one modern bank profile with another.
- 6.20 I recommend that these impacts can be partly mitigated by a reduction in the width of the proposed widening by 1m to the north, as suggested in paragraph 6.6. This will avoid the crest of the present bank and vestigial deposits identified towards the northern end of evaluation Trench 2. The applicant will need to agree with Cadw in writing the east-west extent of this reduction.
- 6.21 Car parking this proposal will see the retention of the open ground in front of the main ditch and rampart at the same level but a reduction of the current grassed area to a line approximately 2.5m (measured from site plan) from the outer lip of the ditch. A minor degree of north to south levelling will be undertaken and a low discontinuous series of hoop barriers are to be set along the edge of this area to prevent encroachment onto the monument
- 6.22 This will in my view have a slight adverse impact on the setting of the monument by reducing the grassed 'buffer' between it and the development, enabling parked cars to periodically intrude into views of and from the earthwork, a vehicle length closer than is possible at present. The hoop barrier will form a visual divide between the monument and the ground in front of it, albeit a low and interrupted one.
- 6.23 However, the surviving earthworks of the monument will remain intact, the archaeological evaluation having demonstrated that the affected ground surface in front of the ditch is the result of modern landscaping and no upstanding earthworks are present in this area. As such, the proposed parking will not in my view alter the present layout, form or any understanding of the monument beyond a change in use for a previously landscaped area of ground, which will be retained at the same level.

I recommend that the visual impact of the extension should be mitigated by the use of a more aesthetically sensitive material such as grasscrete.

Communal values (General)

6.24 Whilst I acknowledge the comments submitted by the objectors that the monument should be presented as a tourist attraction or public open space, this advice relates solely to the scheme presented for this application. It is a matter for the owner to decide if they would prefer the alternative that is suggested by the objectors. In my opinion, the slight impact of the proposed scheme on the aesthetic values of the monument will potentially have a corresponding impact on its communal value by altering the way in which it is experienced. However, this will be offset by the fact that the overall appearance and layout of the monument will essentially remain unchanged and there is a management plan for its ongoing maintenance. Beyond the elements of the scheme included within this application, the broader development also offers opportunities to improve access and install onsite interpretation highlighting the national significance of the Bulwarks for the benefit of visitors and shoppers. This could potentially be linked to other points of interest in the town such as the castle.

7. Conclusions

7.1 <u>Car parking</u> - I recommend that scheduled monument is approved for the proposed car parking within the scheduled monument subject to the recommended conditions set out in section 8.

Reason - the archaeological evaluations have demonstrated that this element of the scheme will have no physical impact on any significant buried archaeological deposits or upstanding earthworks associated with the construction and use of the monument. The features which pre-date the monument, identified during evaluation, are not to be affected and will be retained in situ. I recommend conditions as set out below for a watching brief to cover any outstanding minor interventions and for the footings of the proposed hoop barrier not to be located within undisturbed ground. Minor aesthetic impacts on this area of the monument can be mitigated by a more sensitive choice of surfacing such as grasscrete.

7.2 Access road widening - I recommend that scheduled monument consent is approved for a widening of the access road but with an reduction of its width by 1m to the north of evaluation Trench 2 (east to west extent to be agreed). This will avoid clipping significant archaeological deposits identified at the northern end of the trench and any possible continuation of these or related deposits within the narrow, unevaluated area on the upper slopes of the bank between the trench and the service run. This will also retain the crest of the present northern earthwork bank of the southern bastion.

Reason: The breach for the existing access road, the service run in the base of the northern earthwork bank of the southern bastion, and the evidence Trench 3 of the archaeological evaluations demonstrate extensive modern landscaping and the likely destruction of significant archaeological deposits over most of the area of the proposed road widening.

However, evaluation Trench 2 indicated the survival of significant archaeological deposits, probably related to the construction or use of the southern bastion at and immediately south of the limit of the proposed widening, which would clip the northern end of the trench. In my professional opinion there is potential for these, or related deposits, to extend into the narrow, unevaluated strip on the upper slopes of the bank to the north of the trench. The proposed minor reduction in width will therefore avoid deposits at the northern end of the trench and any continuation of these beyond its limits. Conditions are set below for a watching brief to cover any outstanding minor interventions into the base of the existing breach currently containing service runs.

Reason: This will retain the crest of the present upstanding earthwork bank to the south of the existing road breach and will therefore reduce the visual separation of the southern bastion from the remainder of the monument

7.3 <u>Landscaping and planting</u> - I recommend that scheduled monument consent is refused for the proposed scarification and improvement works to the earthworks of the monument, and for the areas of planting indicated in the landscape methodology and plan.

Reason: Unnecessary physical disturbance/damage to upstanding earthworks and potential to disturb near surface archaeology. This element of the scheme is out of character with the military / defensive purpose of the earthworks where, for example, clear lines of sight are a critical factor.

8. Proposed Conditions

- 8.1 The proposed conditions are intended to protect the monument from damage or significant alteration as set out in *TAN 24 : The Historic Environment.*
- 8.2 The applicant shall afford access at all reasonable times to any Cadw official or archaeologist nominated by Cadw to monitor progress of the works. Cadw shall be given two weeks written notice (e-mail notification is acceptable) in order for its representatives to monitor on site activity.
- 8.3 With the exception of the required adjustments and alterations set out later in the conditions, works shall be carried out strictly in accordance with the following approved plans and documents listed below. No variations from these plans and documents are permitted unless they have been authorised in advance in writing by Cadw.

Number	Document / plan	Reference (where applicable)	Date
1	Application for scheduled monument consent signed by Wendy Hurst		18/05/2018
2.	Cotswold Archaeology Heritage Assessment (updated)	Cotswold Archaeology report 18170	23/05/2018

3	Advice note on amended layout	CA 6579	20/12/2018
4	Cotswold Archaeology information provided with amended class 7 request (Car park layout)	CA drawing 6579	25/03/2019
5	Typical external works details (car park)	SP-04	26/03/2019
6	Cotswold Archaeology Evaluation Report (revised)	CA Report 6791-1	15/05/2019
7	Site plan, latest version	5872BR 00 00 DRA 900100	05/17/2019
8	Landscape proposals plan	173-2018./83 Rev H	09/2018
9	Landscape methodology and 5 year aftercare	2 nd February 2019	02/02/2019

- 8.4 The area of the car park extension within the scheduled area shall be surfaced with grasscrete or some similar sympathetic surface to reduce the aesthetic impact of the car park on the monument. Cadw must approve in advance a material proposed by the applicant.
- 8.5 The hoop barriers at the edge of the car parking area shall be located within the footprint of the previously evaluated area and not within previously undisturbed ground within the scheduled area unless agreed otherwise with Cadw.
- 8.6 The widening of the access road shall be reduced by a width of 1m adjacent to evaluation Trench 2 in order to avoid impact on archaeological deposits observed at the northern end of the trench, any continuation of these to the north, and the crest of the upstanding northern bank of southern bastion. Cadw must agree in writing the east-west extent of the proposed reduction.
- 8.7 No signs, posts, barriers or any other related furniture shall be located within the scheduled area unless otherwise approved in writing by Cadw.
- 8.8 There shall be no planting of trees, shrubs or hedges within the scheduled area as set out in the Landscape Proposals document.
- 8.9 No ground-disturbing landscaping measures (scarification, cultivation) shall be undertaken within the scheduled area.
- 8.10 Temporary fencing shall be erected to protect all areas of the monument unaffected by the proposed development during the course of works. This shall not disturb the ground in any way i.e. Herras fencing or some similar product supported on concrete feet.

- 8.11 There shall be no vehicle or machine tracking, parking or the storage of materials within the scheduled areas during the course of works.
- 8.12 No works, including site clearance, shall commence until Cadw has been informed in writing of the name of an appropriately qualified and experienced archaeological contractor who is to be present during the undertaking of any outstanding excavations within the scheduled area so that a watching brief can be conducted.
- 8.13 No works shall commence until Cadw has approved a written scheme of investigation (WSI) for the watching brief. A digital copy of the watching brief report shall be submitted to Cadw for approval within one month of the archaeological fieldwork being completed.
- 8.14 All staff, contractors and subcontractors shall be given a toolbox talk at the start of works by the appointed project archaeologist on the scheduled status of the site and the sensitivities and restrictions that this carries with it.
- 8.15 Cadw's representative shall be invited to attend a start of works site meeting to review the programme, submitted method statement and arrangements that have been established for archaeological mitigation. This meeting will also establish an appropriate monitoring regime for the duration of the project.
- 8.16 Any historic or archaeological features (not previously identified) which are revealed when carrying out the works shall be retained *in-situ* and reported to Cadw within two working days. Works shall be halted in the area/part of the site affected until provision has been made for retention and/or recording of the feature by a suitably qualified archaeologist in accordance with details submitted to and approved in writing in advance by Cadw.
- 8.17 The applicant shall discuss with Cadw opportunities for site interpretation to inform shoppers and visitors of the monument's significance. Cadw would be pleased to advise on the content of any such interpretation and must approve its location.

Name of Inspector: Will Davies

Date: 19/06/2019



Plas Carew, Uned 5/7 Cefn Coed Parc Nantgarw, Caerdydd CF15 7QQ Ffôn 0300 025 6000 ebost cadw@llyw.cymru www.cadw.gov.wales Plas Carew, Unit 5/7 Cefn Coed Parc Nantgarw, Cardiff CF15 7QQ Tel 0300 025 6000 email cadw@gov.wales www.cadw.gov.wales

Richards Lewis Jehu Group

By email: Richard.Lewis@jehu.co.uk

Eich cyfeirnod Your reference

Ein cyfeirnod Our reference

Dyddiad 10 September 2019

Llinell uniongyrchol Direct line 0300 0256004

Ebost <u>amadminplanning@gov.wales</u> Email:

Dear Mr Lewis,

APPLICATION FOR SCHEDULED MONUMENT CONSENT - THE BULWARKS (CIVIL WAR)(CM009)

Thank you for your application received on 21 August 2019 for scheduled monument consent to remove only the unauthorised construction elements within the above scheduled monument. I have attached a location plan.

These works are authorised under section 2 of the Ancient Monuments and Archaeological Areas Act 1979 but must be carried out subject to the following condition(s):

- 1. access to the site shall be afforded to representatives of Cadw;
- 2. the work shall be undertaken in accordance with the risk and method assessments (received on 21/8/19 and approved by Will Davies on 27/8/19) and the written scheme of investigation (received on 4/9/19 and approved by Louise Mees on 4/9/19).
- 3. any modification to the proposed work shall require the prior written approval of Cadw, before it is undertaken.

Non-compliance with this consent and any conditions attached to it may be an offence and subject to enforcement action or prosecution. If you are not content with the conditions or you would like to discuss any aspects of the consent please contact Louise Mees before commencing work. Your personal data is managed in compliance with the General Data Protection Regulations.

Yours sincerely,

Denise Harris
Casework Manager
Signed under authority of the Deputy Minister for Culture, Sport and Tourism, one of the Welsh Ministers

Mae Gwasanaeth Amgylchedd Hanesyddol Llywodraeth Cymru (Cadw) yn hyrwyddo gwaith cadwraeth ar gyfer amgylchedd hanesyddol Cymru a gwerthfawrogiad ohono.

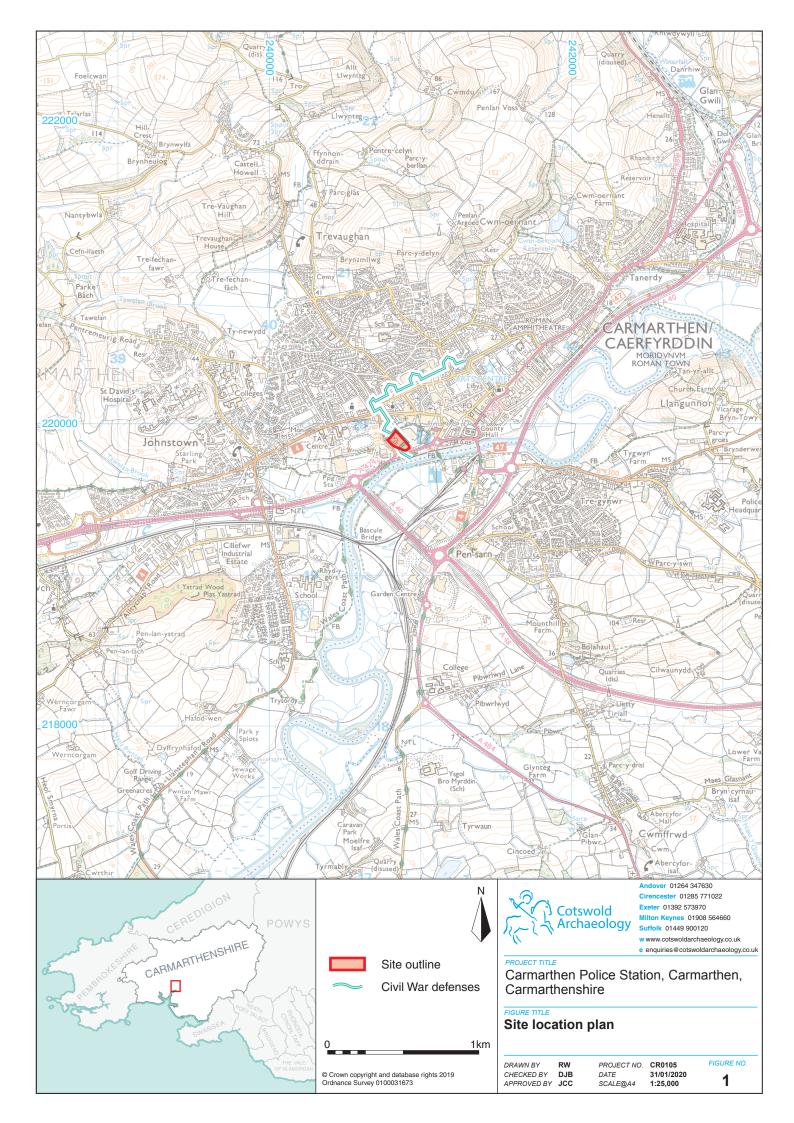
The Welsh Government Historic Environment Service (Cadw) promotes the conservation and appreciation of Wales's historic environment.

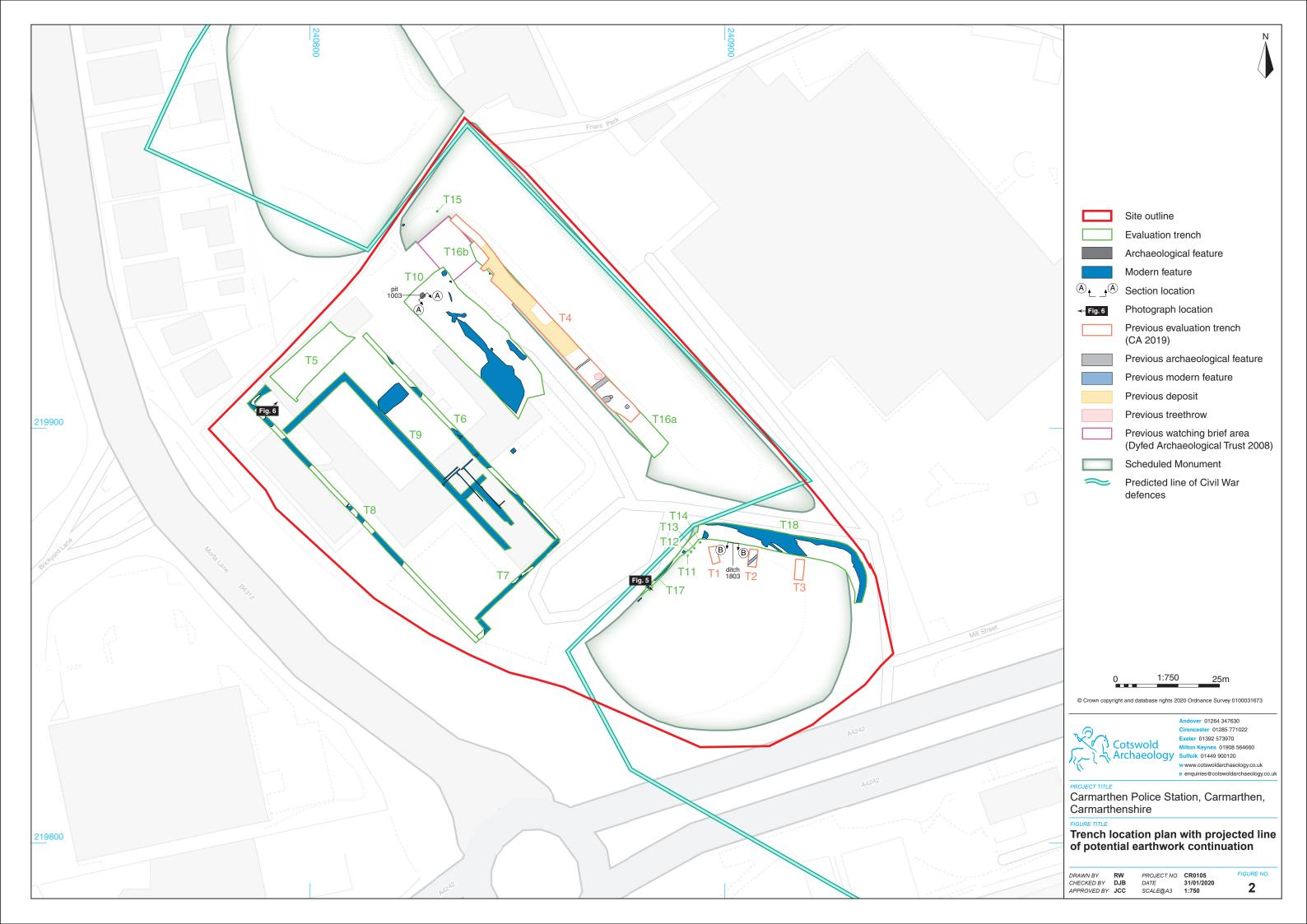




APPENDIX E: OASIS REPORT FORM

Project Name	Carmarthen Police Station, Fria	ars Park, Carmarthen,			
	Carmarthenshire				
Short description	Archaeology during groundworks a	An archaeological watching brief was undertaken by Cotswold Archaeology during groundworks associated with the Lid development at the former Carmarthen Police Station, Friars Park Carmarthen, Carmarthenshire. An undated ditch and pit were revealed, but no evidence for further civil war period archaeology. Negative evidence within the current trenching for a continuation of the visible bulwark earthworks at the southern extremity might perhaps indicate a perpendicular return to			
	civil war period archaeology. Negative trenching for a continuation of the visible				
Project dates 102 August 2019 – 06 December		JL.			
Project type	Watching Brief				
Previous work	Watching Brief (Dyfed Archaeological T Desk-Basd Assessment (CA 2019a)	Watching Brief (Dyfed Archaeological Trust 2008)			
Future work	Unknown				
PROJECT LOCATION					
Site Location	Lidl Foodstore, Former Caramarthen I Carmarthen, Carmarthenshire, SA31 3A	Lidl Foodstore, Former Caramarthen Police Station, Friars Park,			
Study area (M²/ha)	1.3ha				
Site co-ordinates	240831 219897	1101111			
PROJECT CREATORS					
Name of organisation	Cotswold Archaeology (CA)	-			
Project Brief originator	Will Davies				
Project Design (WSI) originator	Cotswold Archaeology				
Project Manager	Oliver Good	Oliver Good			
Project Supervisor	Sam Wilson, Jeremy Clutterbuck and A	Sam Wilson, Jeremy Clutterbuck and Adam Howard			
MONUMENT TYPE	The Bulwarks, CM009	The Bulwarks, CM009			
SIGNIFICANT FINDS	None				
PROJECT ARCHIVES	Intended final location of archive (museum/Accession no.)	Content (e.g. pottery, animal bone etc)			
Physical	N/A	None			
Paper	Carmarthenshire County Museum	Context sheets, paper archive			
Digital	Carmarthenshire County Museum	Database, digital photos			
BIBLIOGRAPHY					
04 (0 1 11 4 1 1) 0000 (Carmarthen Police Station, Friars Park, Car				







Trench 5 working shot, looking north-east



Andover 01264 347630
Cirencester 01285 771022
Exeter 01392 573970
Milton Keynes 01908 564660
Suffolk 01449 900120
wwww.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

DJECT TITLE

Carmarthen Police Station, Carmarthen, Carmarthenshire

FIGURE TITLE

Trench 5: photograph

DRAWN BY RW
CHECKED BY DJB
APPROVED BY OG

 PROJECT NO.
 CR0105

 DATE
 03/02/2021

 SCALE@A4
 NA

FIGURE NO.



Trench 6 pre-excavation, looking north-west (1m scales)



Trench 6 post-excavation, looking north-west (1m scales)



Cotswold Milton Keynes 01908 564660 Archaeology Suffolk 01449 900120 wwww.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.u

PROJECT TITLE
Carmarthen Police Station, Carmarthen,
Carmarthenshire

Trench 6: photographs

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 PROJECT NO.
 CR0105

 DATE
 01/03/2021

 SCALE@A3
 NA



Trench 7 pre-excavation, looking south-west (1m scales)



Andover 01264 347630 Cirencester 01285 771022 Exeter 01392 573970 Milton Keynes 01908 564660 iffolk 01449 900120 www.cotswoldarchaeology.co.uk

e enquiries@cotswoldarchaeology.co.uk

Carmarthen Police Station, Carmarthen, Carmarthenshire

FIGURE TITLE

Trench 7: photograph

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APPROVED BY OG

 PROJECT NO.
 CR0105

 DATE
 03/02/2021

 SCALE@A4
 NA

FIGURE NO.

5



Trench 8 pre-excavation, looking north-west (1m scales)



Trench 8 representative section, looking north-east (1m scale)



Andover 01264 347630 Cirencester 01285 771022 Cotswold Milton Keynes 01908 564660

Milton Keynes 01908 564660

Suffolk 01449 900120

w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

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Carmarthenshire

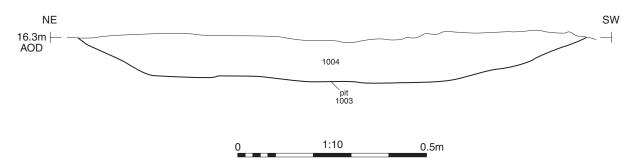
Trench 8: photographs

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 PROJECT NO.
 CR0105

 DATE
 01/03/2021

 SCALE@A3
 NA

Section AA





Trench 10 working shot of machine stripping, looking north-west (1m scales)



Pit 1003, looking south-west (1m scale)



Cotswold Milton Keynes 01908 564660 Archaeology Suffolk 01449 900120 www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.u

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Trench 10: section and photographs

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 7



Trench 17 stratigraphy, looking south-east (1m scales)



Andover 01264 347630
Cirencester 01285 771022
Exeter 01392 573970
Milton Keynes 01908 564660
Suffolk 01449 900120
w www.cotswoldarchaeology.co.uk
e enquiries@cotswoldarchaeology.co.uk

PROJECT TITLE

Carmarthen Police Station, Carmarthen, Carmarthenshire

FIGURE TITLE

Trench 17: photograph

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 CR0105

 DATE
 03/02/2021

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FIGURE NO.

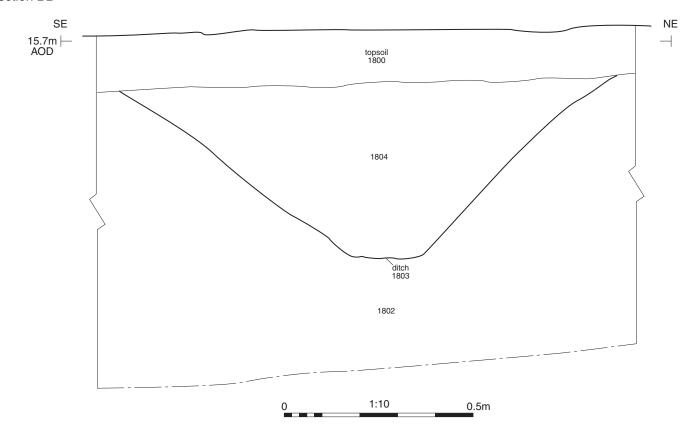


Trench 18, looking north-west (1m scales)



Trench 18 baulk, looking south-east (1m scales)

Section BB





Ditch 1803, looking south-west (1m scale)



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e enquiries@cotswoldarchaeology.co.

PROJECT TITLE
Carmarthen Police Station, Carmarthen, Carmarthenshire

Trench 18: section and photographs

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APPROVED BY OG

 PROJECT NO.
 CR0105

 DATE
 01/03/2021

 SCALE@A3
 1:10



Andover Office

Stanley House Walworth Road Andover Hampshire SP10 5LH

t: 01264 347630

Cirencester Office

Building 11 Kemble Enterprise Park Cirencester Gloucestershire GL7 6BQ

t: 01285 771022

Exeter Office

Unit 1, Clyst Units Cofton Road Marsh Barton Exeter EX2 8QW

t: 01392 573970

Milton Keynes Office

Unit 8 - The IO Centre Fingle Drive, Stonebridge Milton Keynes Buckinghamshire MK13 0AT

t: 01908 564660

Suffolk Office

Unit 5, Plot 11, Maitland Road Lion Barn Industrial Estate Needham Market Suffolk IP6 8NZ

t: 01449 900120

e: enquiries@cotswoldarchaeology.co.uk

