

EBPG/03



ENGLISH BICKNOR PRIMARY SCHOOL

Archaeological Evaluation

commissioned by Asset Management and Property Services,
Gloucestershire County Council

June 2014

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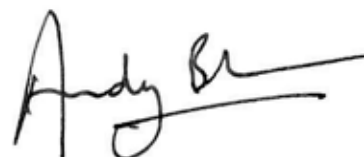
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ENGLISH BICKNOR PRIMARY SCHOOL

Archaeological Evaluation

Headland Archaeology (UK) Ltd. excavated four test pits and a series of auger holes at English Bicknor Primary School, Gloucestershire within the scheduled area of English Bicknor Castle. Archaeological monitoring was also undertaken during the excavation of geotechnical boreholes on the site. The line of the inner bailey moat was identified and the sequence of deposits within the moat. A potential basal moat deposit was identified at a depth of 2.15m below ground level. A red clay deposit overlying the basal deposits is likely to relate to the backfilling and levelling of the feature in the 19th century.

1 INTRODUCTION

The Asset Management and Property Services division of Gloucestershire County Council is seeking planning consent for the replacement of existing pre-fabricated classrooms at English Bicknor Primary School with three timber-framed modular classrooms on the same site. The site is located within the grounds of a Motte and Bailey Castle.

The site is designated as a Scheduled Monument (SM 28862) under the Ancient Monuments and Archaeological Areas Act 1979, and as such consent from the Secretary of State for Culture, Media and Sport is required to undertake ground-breaking activities on the site.

Headland Archaeology was commissioned to undertake a scheme of archaeological works and to monitor the excavation of geotechnical boreholes in order to provide supporting information regarding the archaeological resource and to enable appropriate decisions to be reached regarding the planning submission.

A project design for undertaking the archaeological evaluation was submitted by Headland Archaeology for approval, and agreed by English Heritage and the archaeological advisor to the planning authority, Mr Charles Parry. Scheduled Monument Consent to undertake the archaeological works was granted on 23rd May 2014 (Ref: S00084617).

1.1 SITE DESCRIPTION

The proposed development site is located within the grounds of English Bicknor Primary School, at NGR 358080,215759 (**ILLUS 1**). The classrooms proposed for replacement are situated immediately to

the west of the motte of English Bicknor Castle on the projected line of the encircling moat.

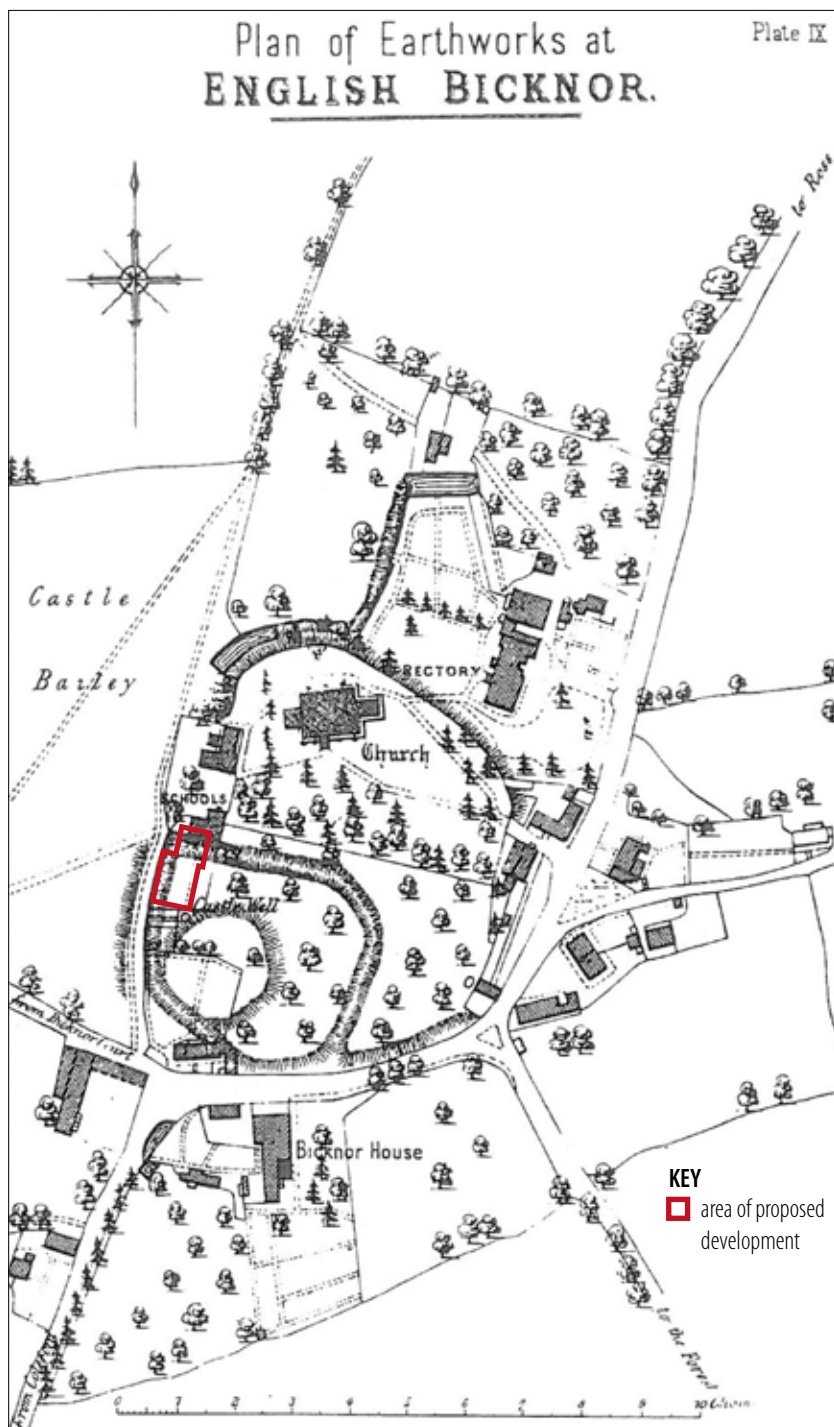
The site is underlain by Black rock limestone. No drift deposits are recorded. (British Geological survey website; <http://www.bgs.ac.uk>)

1.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

English Bicknor castle is of motte and bailey construction sited on high ground above the River Wye. Like hundreds erected throughout the country in the period following the Norman invasion in 1066, the castle is likely to have been built in the late 11th century. The site includes an inner bailey in which the motte is built, and a larger outer bailey, both enclosed by a large moat. An earthwork adjoining the north side of the outer bailey is thought to be the remains of a leat, part of a larger water management system.

The Grade 1 listed church of St Mary the Virgin is located within the castle's outer bailey. The church dates to the 12th century with later medieval alterations and some 19th century reconstruction. Maclean (1880) states 'when about four years ago, excavations were made into the side of the mound for the purpose of filling the ditch to make a garden for the school master, a small room about 12 feet square was discovered, constructed of Norman Masonry'. The in-filled western ditch runs under the modern school playground. Maclean believed that the stone building represented the remnants of a stone keep.

In 1995 a watching brief was carried out during the excavation of an electricity cable trench across the bailey of the castle (BGAS 1995). The trench was aligned N-S across the playground approximately five metres to the north of Trench 4 of the present evaluation.



ILLUS 2

Plan of earthworks at English Bicknor (1880)

1.3 CARTOGRAPHIC BACKGROUND

The tithe map for the area dated to 1838 identifies the area of the castle Bailey but no detail is shown. The church, school and possible school house are illustrated. A plan of the earthworks at English Bicknor dated to 1880 (ILLUS 2) also shows the school and school house (Maclean 1880). The earthworks of the inner bailey ditch and the moat enclosing the south-west/west boundary of the castle are illustrated as open features, however Maclean's accompanying text describes the backfilling of the moat adjacent to the school house. Either the map was drafted prior to this event, or the author has projected the line of the moat, and ignored the landscaping work. The 1881 Ordnance Survey map (ILLUS 3) clearly shows a large quadrant removed from the south west corner of the motte, as well as the now filled-in moat ditch along the western edge of the castle defences. A well is illustrated to the south of the area of proposed trenching, with what appears to be a small path approaching it from the west.

The 1922 Ordnance Survey map (ILLUS 4) indicates the presence of a small rectangular structure within the garden of the school house. This potentially represents an exterior toilet or potting shed.

2 OBJECTIVES

In general the purpose of the evaluation is to provide sufficient information to predict any impact the proposal may have by establishing the extent, nature and importance of any heritage assets within the affected area (following the national planning policy framework). This will feed into any design solution needed to minimise the impact thus

enabling an acceptable final foundation design for the new build and to enable English Heritage to come to a decision regarding the Scheduled Monument Consent.

The local and regional research contexts are provided by the archaeological research framework for the south west. Any evidence retrieved during the works will be analysed in light of the objectives contained in these frameworks.

The resulting archive will be organised and deposited with Dean Heritage Centre to facilitate access for the future research and interpretation for public benefit.

Below modern deposits was a layer of clean yellow/red sandy clay containing sandstone blocks. The excavator interpreted the deposit as a geological deposit although it may have been re-deposited. No finds were recovered. The foundation of the wall that forms the southern boundary of the churchyard was observed to continue under the school playground. Rubble associated with the demolition of the school house was also identified.

In 1999 an archaeological evaluation carried out in advance of a planned extension to the present school buildings, determined the absence of banks or ditches in this part of the outer bailey, and established the presence of a wall interpreted as the north wall of the former school house (Nichols 1999)

3 METHOD

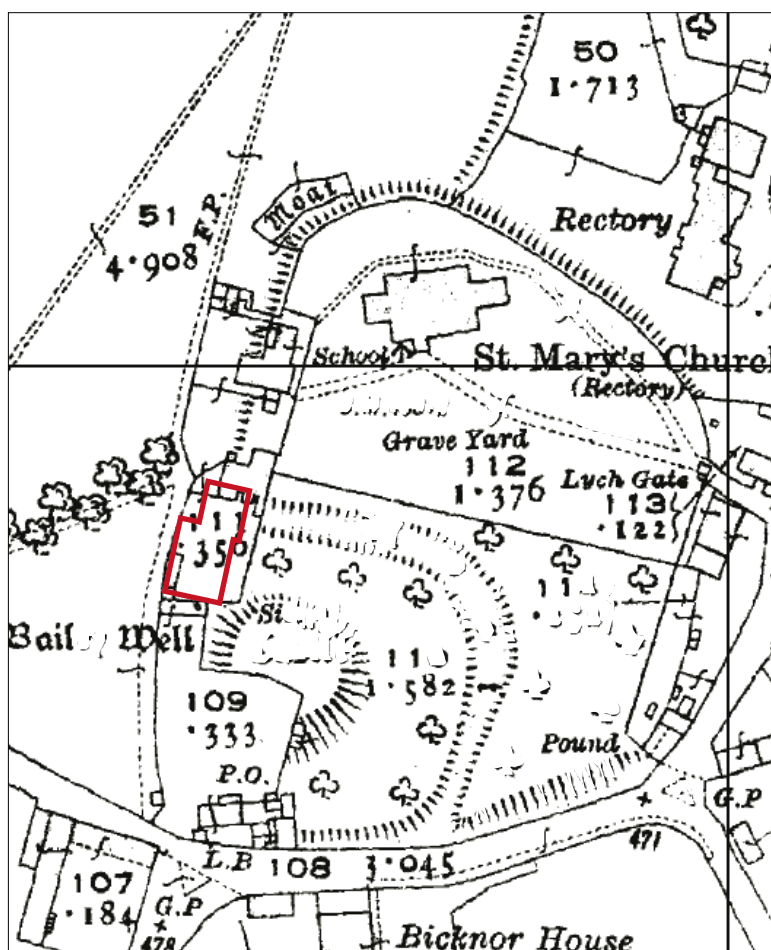
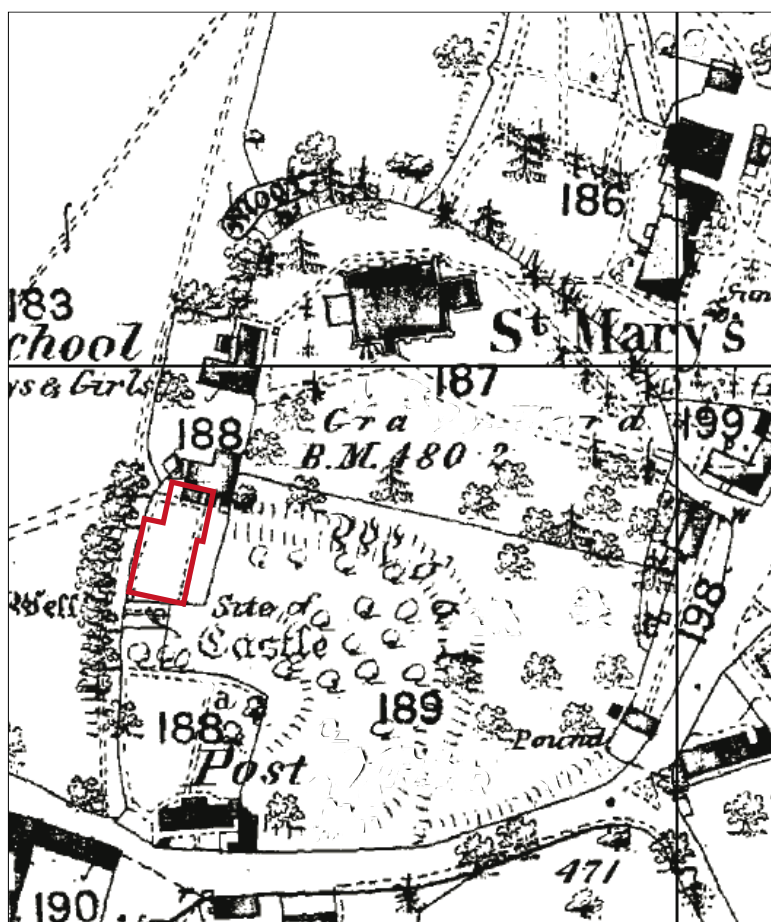
Four trenches were excavated adjacent to the present pre-fabricated buildings (ILLUS 5). All trenches were hand excavated to a maximum depth of 1m, unless significant archaeological deposits were encountered. At the base of each archaeological evaluation trench, hand augering was carried out to further clarify the nature of the deposits beyond the 1m excavation limit.

In addition to the auger holes excavated in the base of each trench, a line of 5 auger holes was excavated in the south of the site in order to establish a profile of the moat.

Archaeological monitoring was undertaken during the mechanical excavation of two geotechnical boreholes (BH3, BH5). In addition, test pits were excavated for geotechnical purposes into the bases of Trenches 1 and 4 (BH1, BH4).

Geotechnical boreholes were excavated using a terrier-type boring rig to retrieve sleeved samples. The stratigraphic sequence of deposits was recorded from the recovered sample cores.

All recording was conducted in accordance with IfA standards and guidance. Appropriate sections and plans were drawn for all excavated test pits, and a comprehensive photographic record was maintained comprising black and white film, colour slide film, and digital images. Levels across the site were recorded relevant to OS datum.



ILLUS 3

1881 Ordnance Survey map

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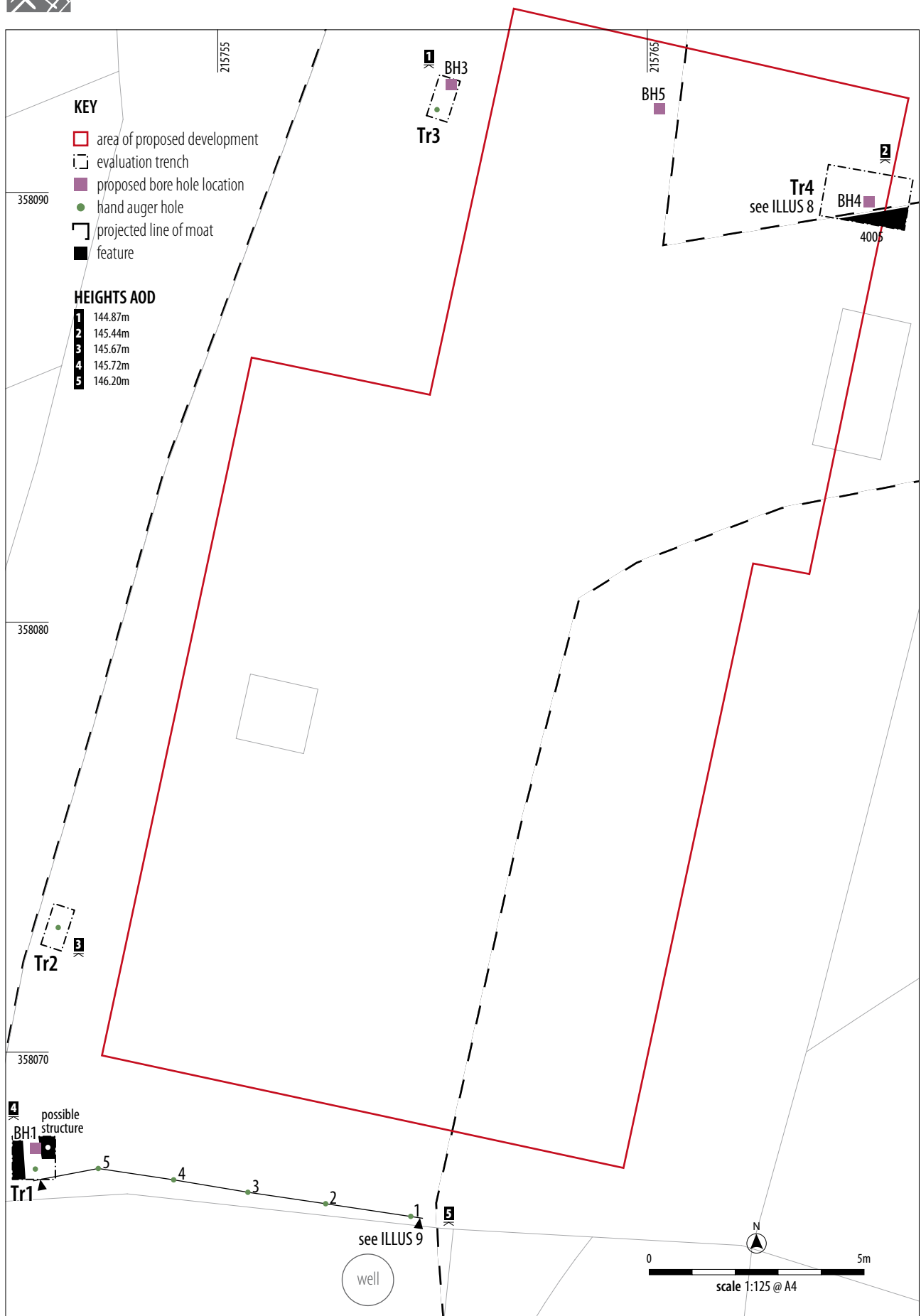
ILLUS 4

1922 Ordnance Survey map

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KEY

■ area of proposed development



ILLUS 5

Trench and borehole locations and key features



ILLUS 6

Trench 1; structural remains (camera facing N)

ILLUS 7

Trench 2; redeposited clay (N and E facing sections)



4 RESULTS

4.1 TRENCH 1 / BOREHOLE1 (MOD 145.72)

An alignment of three limestone blocks [1004] standing one course high, measuring approximately 0.30m wide x 0.25m deep, was identified 0.20m below the existing ground level (ILLUS 6). The structure was aligned north-south and overlay a red clay deposit [1003]. Also overlying the clay, and situated adjacent to the structural feature was a large limestone block [1005] with a circular hole (0.18m diameter) cut into the surface and extending through the block to a depth of 0.40m.

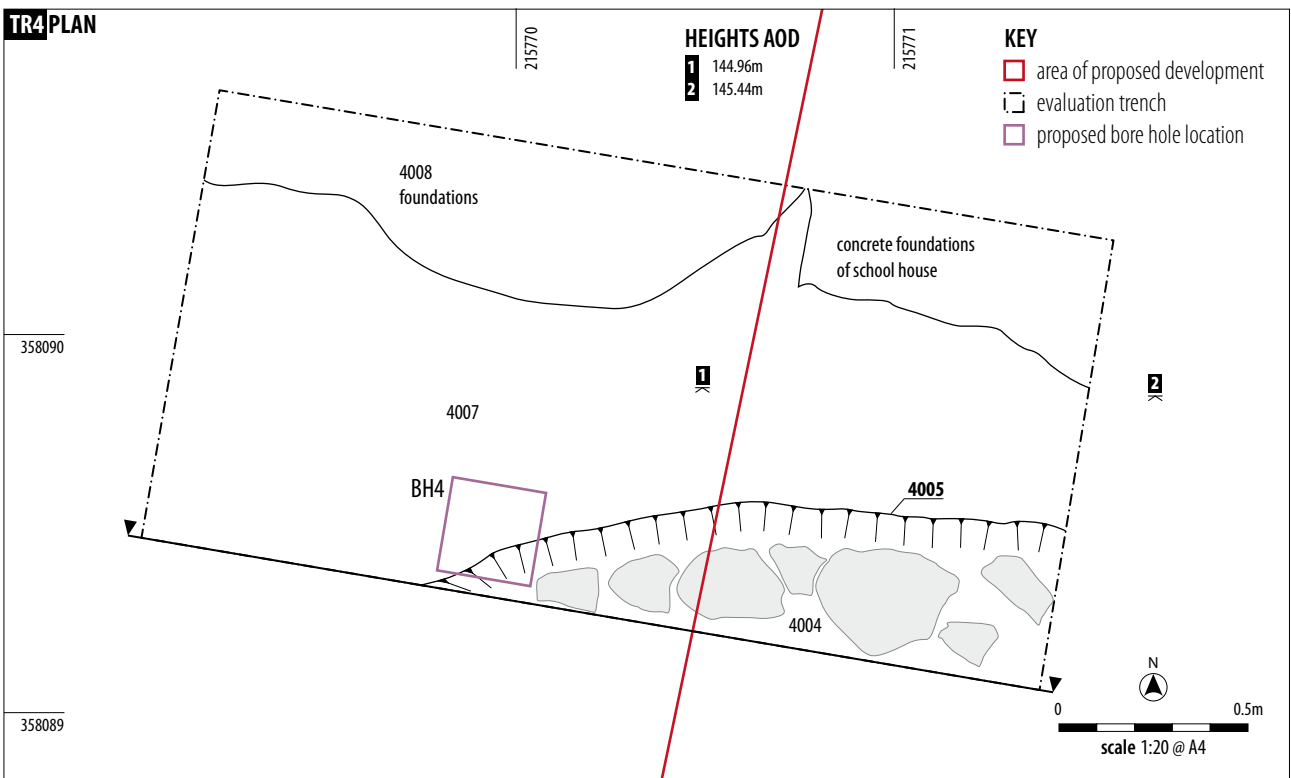
Augering identified a continuation of the red clay deposit to a depth of 1.20m below ground level at which point resistance, believed to be caused by the presence of bedrock prevented further augering.

4.2 TRENCH 2 (MOD 145.67)

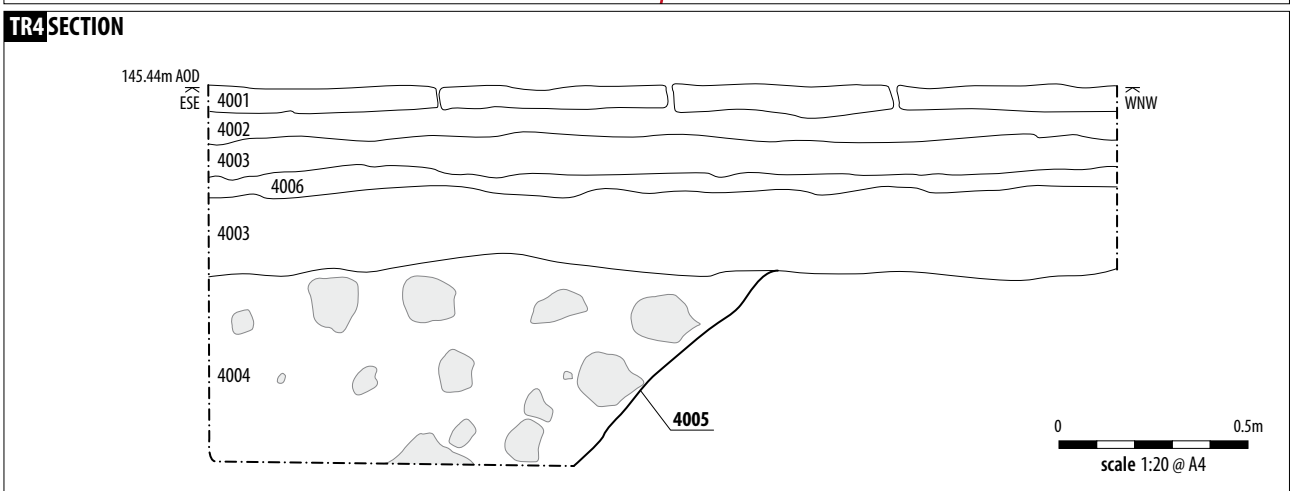
Trench 2 was hand excavated to a depth of approximately 1m below ground level (ILLUS 7). Modern pea gravel [2001] and topsoil [2002] overlay a deposit of red clay [2003] similar in composition to the red clay deposit identified in Trench 1. The clay extended to a depth of 0.80m below ground level, at which point a clean deposit of yellow clay [2004] believed to be natural was identified. Augering was undertaken in the base of the trench. The yellow clay deposit



TR4 PLAN



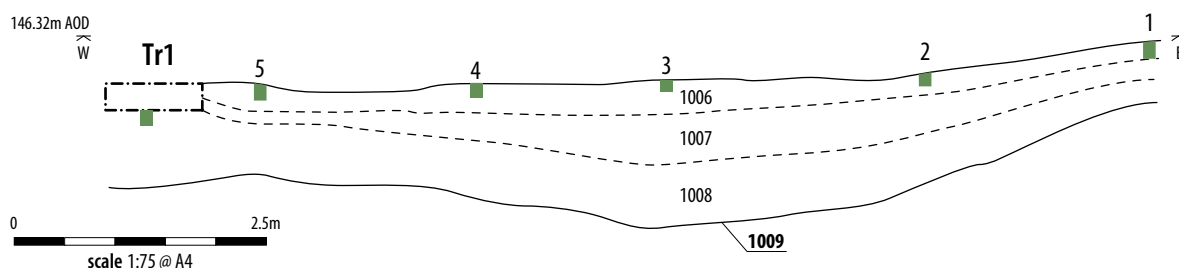
TR4 SECTION



TR4 PHOTO



ILLUS 8
Trench 4 (inner moat fill)



ILLUS 9

Profile of moat based on results of auger survey

continued to a depth of 1.70m before resistance, believed to be bedrock, prevented further augering.

4.3 TRENCH 3/BOREHOLE 3 (MOD 144.87)

Trench 3 was located within the postulated central channel of the moat. Upon removal of the upper modern hardcore deposits a water services pipe was located. Hand excavation continued to the east of the service. Beneath a modern deposit of sandy clay [3004] present to a depth of 0.50m below ground level, a gravel deposit [3005] containing large angular pieces of sandstone continued to a depth of 0.95m below ground level.

Geotechnical investigation identified a humic clayey silt deposit [3007] at a depth of approximately 2.15m below ground level. The deposit was located beneath a red clay deposit [3006] comparable to the clay deposits identified in Trenches 1 and 2.

4.4 TRENCH 4 / BOREHOLE 4 (MOD 145.44)

Beneath a black, ashy 19th century levelling deposit, natural yellow clay deposits [4007] were identified at a depth of 0.45m below ground level. Cut into the natural clay was an east-west orientated feature [4005], coinciding with the postulated position of the northern edge of the moat (ILLUS 8). The feature was filled with a firm red clay [4004] with frequent large stone inclusions. Due to the stoney nature of the deposit attempts to auger into the deposit were unsuccessful.

A geotechnical borehole was excavated into the geological deposits [4007] to a depth of 2.00m below ground level.

Concrete foundations were identified running along the north side of this trench in a location which equates to the position of the school house which was still standing on the site until 1990.

4.5 BOREHOLE 5 (OD 145.20)

Located immediately to the north of the present school buildings on the edge of the playground, this borehole was excavated to a depth of approximately 3.3m. Below modern deposits of made ground was a brown sandy clay extending from a depth of 0.40m to 1.50m below ground level with natural yellow clay deposits extending below this to the full 3.3m depth of excavation.

4.6 AUGER SURVEY (OD 146.20)

A line of five auger holes was excavated to the south of the present school classrooms in an area of undergrowth (ILLUS 9). Excavation indicated a profile consisting of 0.30m of humic topsoil [1006], a deposit of limestone backfill [1007] approximately 0.60m thick, overlying a deposit of red clay [1008]. Firm deposits thought to be bedrock were identified at 1.2 to 1.4m below ground level. The indications were of a shallow ditch profile although the results were inconclusive. No boreholes were excavated in this part of the site.

5 DISCUSSION

The cut feature [4005] identified within Trench 4 correlates with the position and orientation of the inner moat as recorded on historic maps of the site. The heavy red clay deposit identified in all the trenches appears to relate to the capping or the backfilling of the moat. The deposit was devoid of dateable material and appears to have been rapidly deposited in order to backfill the moat and level the site. The deposition of the clay and levelling of the site would appear to relate to the events described by Maclean (1880) and date to c.1876.

The presence of a humic deposit beneath the red clay within Borehole 3 raises the possibility that basal moat deposits survive beneath the clay backfill within the footprint of the proposed development, however, the deposit was not observed elsewhere on the site which may suggest that the deposit is not widespread. The depth of the potential basal deposit (2.15m below ground level) affords it some protection from the proposed development of the site.

The line of auger holes excavated in the south of the site identified a similar red clay deposit to that observed in the north of the site. No organic deposits were observed, with the clay overlying limestone bedrock. A crushed limestone deposit overlying the clay was observed within the line of auger holes and within Borehole 3 to the north, potentially representing a further phase of levelling following settlement of the red clay.

The profile of the moat identified from auger survey and Trenches 1 and 2 in the south of the site suggests a gently sloping eastern edge to the moat with an undulating base. The western edge of the moat was not identified, and therefore must be located to the west of Trenches 1 and 2.



Over the evaluated area, no significant archaeological remains were encountered at a level above 0.45m from the present ground surface. The red clay present beneath this depth is likely to have been deposited in the late 19th century and is of limited archaeological value. Trenches 3 and 4 provided the clearest evidence of the line of both the inner Bailey moat and the outer ditch, while the deposits in Trenches 1 and 2 confirmed that the western edge of the moat lies to the west of the evaluation area.

The structural features identified in Trench 1 appear to relate to a small building evident on the 1881 Ordnance Survey map (and more clearly illustrated on the map of 1922). The location of the building at the southern extent of the school house garden raises the possibility that it is an external toilet or garden building contemporaneous with the house itself.

6 CONCLUSION

The evaluation has successfully identified the northern edge of the inner moat and the sequence of deposits present within the feature. Levelling and backfilling of the moat took place in the 19th century in order to create a garden for the school house. The top of the moat survives at a depth of 0.45m below ground level, with potentially significant archaeological deposits identified at a depth of 2.15m.

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Ordnance Survey 1922 1:2500

Ordnance Survey 1989 1:2500

8 APPENDICES

APPENDIX 1 TRENCH AND CONTEXT REGISTER

Trench 1

Context	Description	Dimensions	Deposit depth (BGL)
1001	Dark brown, humic topsoil	1.0m x 1.0m x 0.50m (augering continued to a depth of 1.20m)	0.30m
1002	Light brown, sandy clay, friable, degraded limestone		0.30m–0.50m
1003	Orangey red clay, firm, occasional fragments of limestone		0.50m–1.2m
1004	Linear stone structure. Single course deep. Comprising blocks of hewn limestone, running north/south. No mortar.		0.25m deep x 0.30m wide
1005	Block of sandstone containing regular circular hole, overall dimensions; 0.40m deep x 0.45m wide.		Hole dimensions; 0.18m diameter x 0.40m deep

Summary of excavation; two possibly related structures post dating 1880 overlying red clay deposit potentially relating to backfilling of moat.

Auger survey

Context	Description	Dimensions	Deposit depth (BGL)
1006	Dark brown silty clay topsoil - humic	Depths measured at deepest point of profile (auger hole 3)	0.00–0.30m
1007	Limestone gravel with larger limestone fragments present		0.30–0.80m
1008	Firm red clay		0.80–1.40m

Summary of excavation; Auger survey in order to observe transect across moat. Base of moat observed

Trench 2

Context	Description	Dimensions	Deposit depth (BGL)
2001	Pea gravel	1.20m x 0.60m x 1.0m (augering continued to a depth of 1.70m)	0.03m
2002	Light brown, sandy clay deposit		0.03–0.10m
2003	Orangey reddish clay, firm, occasional limestone fragments		0.10m–0.80m
2004	Mottled yellow, friable, sandy clay. No inclusions		0.80m–1.70m

Summary of excavation; Deposit [2003] appears to relate to the backfilling of the moat.

Trench 3

Context	Description	Dimensions	Deposit depth (BGL)
3001	Flag stones	1.20m x 0.60m x 1.0m (BH continued to depth of 2.15m)	0.06m
3002	sand		0.06–0.10m
3003	Pinkish sedimented concrete		0.10–0.30m
3004	Ashy sandy clay		0.30m–0.50m



Context	Description	Dimensions	Deposit depth (BGL)
3005	Creamy limestone gravel containing large limestone blocks		0.50m–0.95m
3006	Reddish clay		0.95–2.15m
3007	Brown, soft, clayey silt		2.15m+

Summary of excavation; no significant structural archaeology, but possible basal moat deposit identified beneath red clay [3006].

Trench 4

Context	Description	Dimensions	Deposit depth (BGL)
4001	Stone flags	2.40m x 1.20m x 1.00m (BH continued to depth of 2.00m)	0.06m
4002	Sand		0.06–0.18m
4003	Silty sandy ash		0.18–0.45m
4006	Black sandy charcoal lens within [4003]		0.30m–0.38m
4005	Cut of possible moat ditch of inner bailey		0.45m–1.00m+
4004	Firm red sandy clay, common large stones, 0.15m x 0.20m		0.45m–1.00m+
4007	Natural yellow sandy clay		0.45m–2.00m+
4008	Concrete foundations		

Summary of excavation; later 19th century levelling deposits. Edge of inner moat identified. Filled with red clay as identified in other trenches.



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