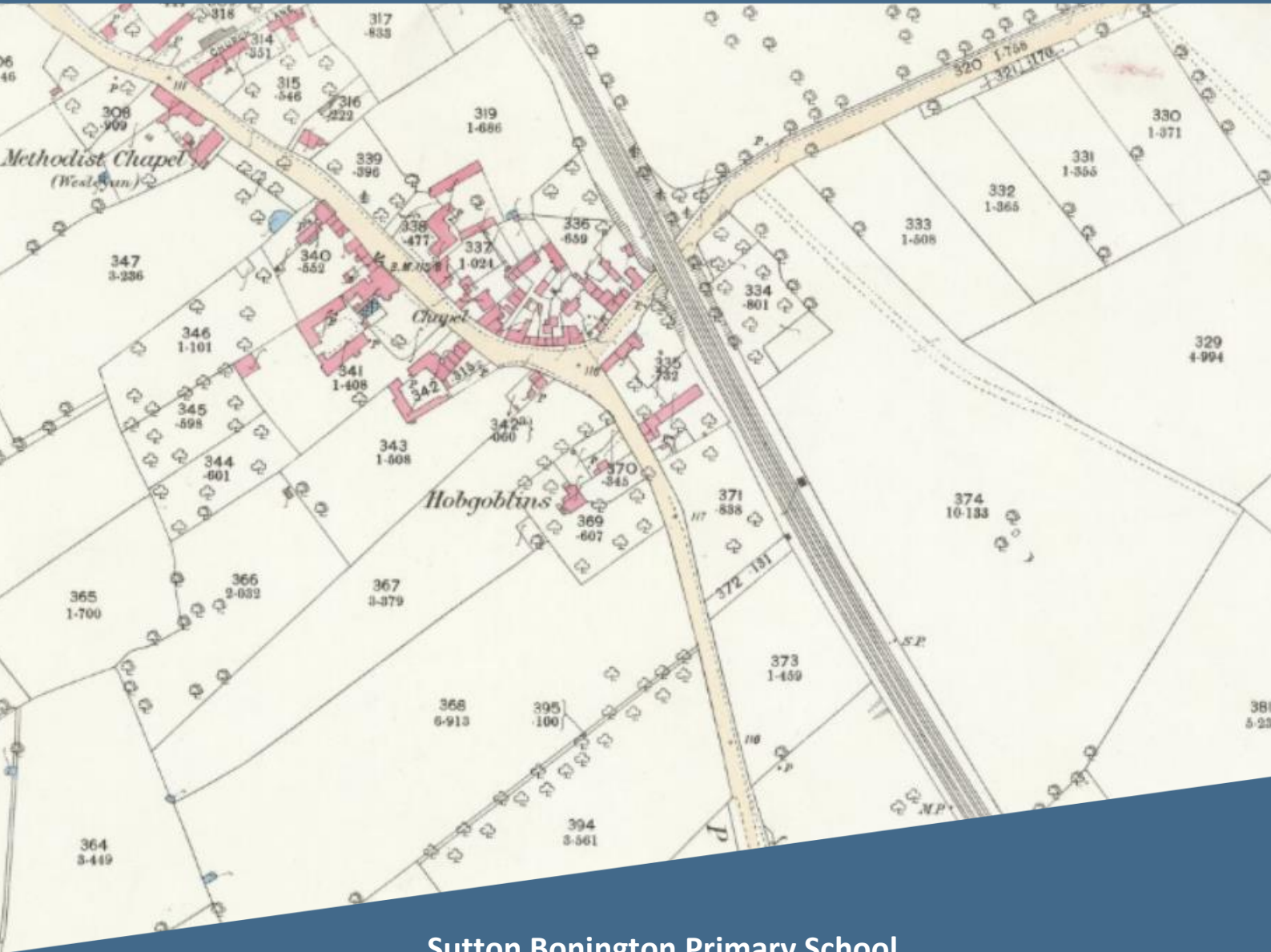


## Written Scheme of Investigation for Archaeological Observation



Sutton Bonington Primary School  
Park Lane  
Sutton Bonington  
Loughborough  
LE12 5NH

On behalf of

Bowmer and Kirkland

August 2023

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*Cover: Extract from the Ordnance Survey 25-inch map of 1884 (Nottinghamshire XLIX.11)*

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## 1 Introduction

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Border Archaeology (BA) has been instructed by Bowmer and Kirkland to carry out a programme of Archaeological Observation (AO; controlled watching brief) at the Sutton Bonington Primary School, Park Lane, Sutton Bonington, Loughborough LE12 5NH (NGR: SK 50896 24666; *fig.1*).

The proposed development will involve the demolition of the existing main school building, this being replaced with a new school building of similar footprint and massing; further refurbishment will be undertaken on another existing school building, while a temporary school building will be erected for use during the construction period (*fig. 2*).

In accordance with the *National Planning Policy Framework* (Ministry of Housing, Communities & Local Government 2021), planning permission for the proposed works (Planning Ref.: 23/01174/FUL) is currently awaiting decision by Rushcliffe Borough Council; however, Emily Gillott, Planning Archaeologist for Nottinghamshire County Council has recommended the following archaeological condition for the works:

*No development shall take place until the applicants, or their agents or successors in title, have secured the implementation of a programme of archaeological control and supervision to be carried out during groundworks on the site, by a professional archaeologist or archaeological organisation. The details of such a scheme of investigation shall be submitted to and approved in writing by the LPA also prior to commencement of the development of the site.*

This Written Scheme of Investigation (WSI) has therefore been prepared by Lyndsey Clark BSc MCI<sup>FA</sup>, Director: Archaeological Operations & Reporting, with reference to Section 3.2 of *Standard and guidance for an archaeological watching brief* (CI<sup>FA</sup> 2020a). It is for submission to the Planning Archaeologist as a methodology for the proposed archaeological programme.

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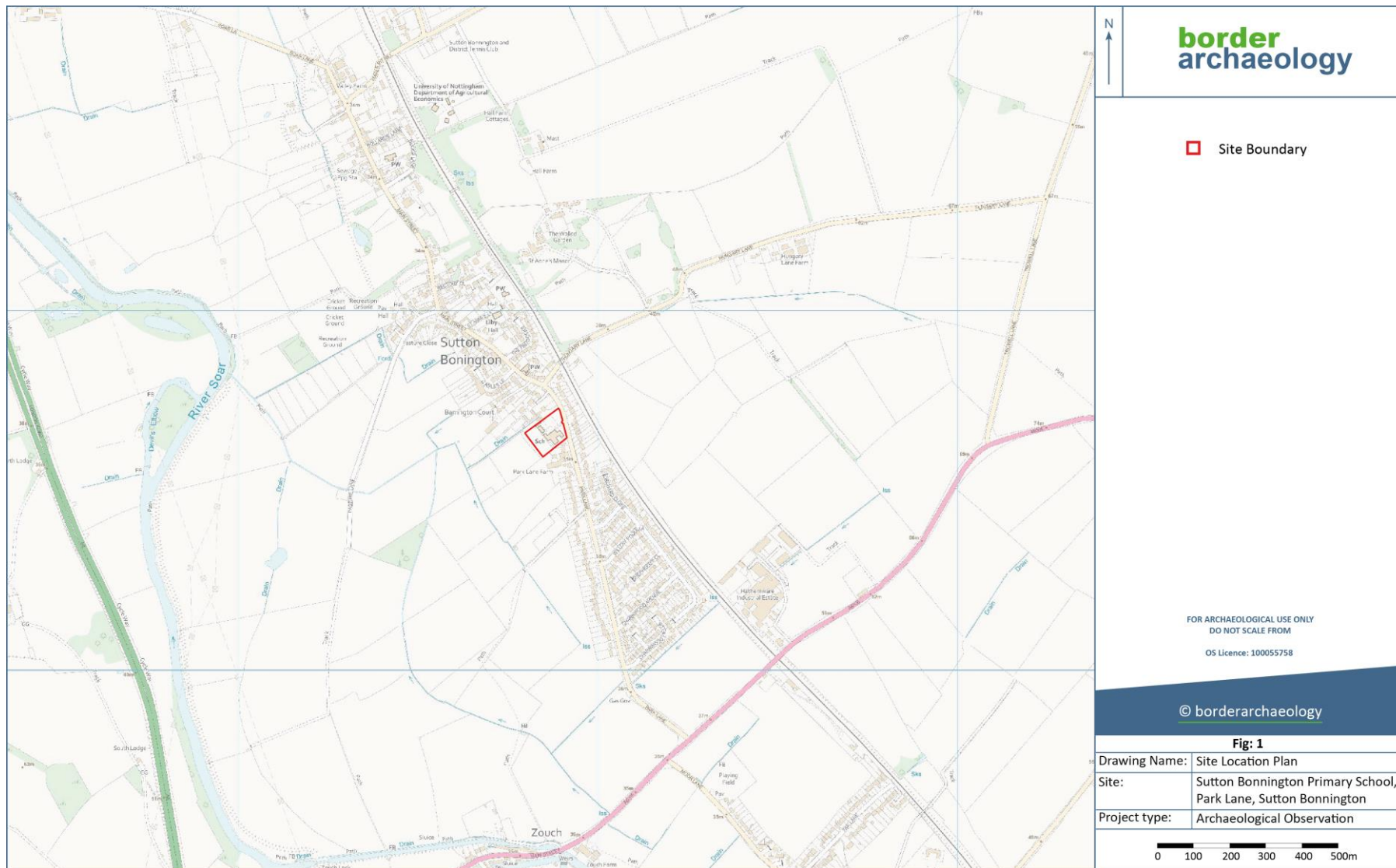
## 2 Site Description

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The proposed development site is situated within the village of Sutton Bonington, south-west Nottinghamshire, approximately 6km to the N of central Loughborough. It lies at a height of c. 36m AOD and encompasses a sub-rectangular plot of land on the W side of Park Lane, measuring c. 8300 sqm. The Site is situated to the S of the Sutton Bonington Conservation Area, as designated by Rushcliffe Borough Council, and the neighbouring properties to the N, Nos. 6 and 8 Park Lane, are both Grade II Listed (HER No.: MNT20177; List Entry No.: 1242373).

The original school building, which is considered to be a non-designated heritage asset, was built in c. 1908 and further modern extensions were added to its rear between 1953 and 1970. It is largely screened by mature trees and hedges and is bounded by an agricultural field to the W, Park Lane to the E, and residential properties that front onto Park Lane to the N and S.

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## 2.1 Soils & geology

The British Geological Survey (BGS) records the underlying bedrock at the Site as comprising mudstone of the Gunthorpe Member, a sedimentary bedrock that formed between 237 and 247.1 million years ago during the Triassic Period. This is largely overlain by superficial deposits of sand and gravel belonging to the Syston Gravel Terrace, which formed between 11.8 and 116 thousand years ago during the Quaternary Period, although a small spur of Head clay, silt, sand and gravel is recorded within the NE corner of the Site (BGS 2023).

Historic borehole data from land c. 230m to the S of the Site (BGS Reference: SK52SW38; NGR: SK 50902 24424) recorded topsoil to a depth of 0.6m below ground level (bgl), overlying a dark brown, very clayey and silty, fine to coarse sand to a depth of 0.9m bgl. This was situated above a light reddish brown, slightly silty, gravelly sand to a depth of 1.5m bgl, which in turn overlay a brown sand and gravel deposit to a depth of 4.1m bgl. The final deposit encountered extended to the bottom of the borehole at c. 5m deep and comprised a stiff, red-brown, very clayey silt with many lithorelicts and occasional thin bands of weak, grey-green, siltstone (BGS 2023).

## 3 Brief Historical & Archaeological Background

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An Archaeological Desk-based Assessment (ADBA) and a Heritage Assessment (HA) detailing the historical and archaeological background of the Site within a 500m study area were previously produced by BA in April 2023 (BA 2023a; 2023b), and the following summarises the information contained therein.

### 3.1 Prehistoric & Romano-British

While the Nottinghamshire Historic Environment Record (HER) records prehistoric activity within the wider vicinity of the Site, evidence within the designated study area is limited to a Neolithic stone axe head (HER Nos.: ENT3335; MNT7862), which was found in The Rectory garden c. 498m to the NNW.

An archaeological evaluation undertaken at The Rectory in 2001 (HER Nos.: MNT12129; ENT3935; Chapman & Finn 2001) also produced evidence for Romano-British activity, including a narrow 1<sup>st</sup>-4<sup>th</sup> Century gully, a broad 2<sup>nd</sup> Century ditch, two probable Romano-British pits/post holes, and a 3<sup>rd</sup> Century Roman coin; a 2<sup>nd</sup> Century coin (HER Nos.: MNT26; ENT325) was also found in The Rectory garden at some date prior to 1932.

### 3.2 Medieval

The place-name Sutton Bonington is believed to have Anglo Saxon origins relating to two separate manors, with *sūth* and *tūn* meaning 'south farmstead or village' and Bonington being an 'estate associated with a man called Buna' in Old English (Mills 1998, 334).

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The Domesday Survey of 1086 records the two, written as *Sudtone* and *Bonitone*, as small settlements within the hundred of Rushcliffe. The former had a recorded population of nine households, comprising of six villagers and three freemen, and is listed under four owners: Earl Hugh of Chester, Count Robert of Mortain, and a man named Siward, who is listed twice (Powell-Smith 2023a). The latter had a recorded population of 16 households, comprising 13 villagers and three freemen, and is listed under three owners: Earl Hugh of Chester, Henry of Ferrers, and King William (Powell-Smith 2023b). The two settlements eventually merged together and by 1340 they were known as ‘*Sutton Bonyton*’ (Stenson 2023).

There is extensive evidence for Medieval activity within the designated study area for the Site, including the Grade II Listed Church of St. Anne (HER No.: MNT12444; List Entry No.: 1242374), which is located c. 410m to the NNW. This contains elements from the 13<sup>th</sup> (HER No.: MNT35), 14<sup>th</sup> (HER No.: MNT9710) and 15<sup>th</sup> Centuries (HER No.: MNT9711), although it is thought to have earlier origins based on a deed which states that Gregory de Diva gave the Church of St. Anne to the Priory of Calke in the late 11<sup>th</sup> to early 12<sup>th</sup> Century (Southwell and Nottingham Church History Project 2023).

Although demolished in the 1960s, the late Medieval Sutton Bonington Manor (HER Nos.: MNT10826; MNT25923) was also located c. 430m to the NNW of the Site, and the nearby archaeological evaluation at The Rectory revealed features and finds of Medieval date (HER Nos.: MNT12126; MNT12128; MNT12130; MNT12131; ENT3935; Chapman & Finn 2001), while the remains of possible Medieval buildings were recorded on Main Street (HER No.: MNT26086); a series of undated but probable Medieval earthworks, including ridge and furrow, lynchets, and a holloway, also survive in the fields surrounds the village (HER Nos.: MNT7827; MNT7828; MNT7829; MNT7831).

Of most significance to the proposed development area, however, is the site of Repingdon Grange (HER Nos.: MNT14559; MNT3330), a former late Medieval monastic grange or manor farm that extended into the northern part of the Site. The only surviving feature of the grange is a Grade II Listed, 20m long rubble wall and doorway (HER No.: MNT18642; List Entry No.: 1242400), which survives within the garden of No. 6 Park Lane c. 50m to the NE.

### 3.3 Post-Medieval & Modern

Repingdon Grange remained in use in some capacity into the Post-medieval period, with an 1811 description by a W. Clarke describing how the grange retained enough of its structure to be in use as a barn, while the house was *...now occupied as two cottages* (Buckland 1925). The cottages described are the present-day Grade II Listed Nos. 6 and 8 Park Lane (HER No.: MNT20177; List Entry No.: 1242373), which date to the late 16<sup>th</sup>/early 17<sup>th</sup> Century but contain earlier construction material likely from the former grange (Buckland 1925).

The aforementioned archaeological evaluation undertaken at The Rectory (HER Nos.: ENT3935; MNT12127; Chapman & Finn 2001) also revealed evidence of late Medieval/Post-medieval activity, including a backfilled well, a large linear ditch, and a large circular pit.

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The remaining Post-medieval and modern assets within the designated study area relate to buildings and structures that are either still extant or exist only in the documentary record. The documentary evidence relates to former structures from WWII – including a fire service team guardhouse (HER No.: MNT15906; MNT5942), the Hungary Lane armament depot (HER Nos.: MNT15911; MNT5948) and an air raid shelter at St Anne's Rectory (HER Nos.: MNT15912; MNT5949) – while the extant assets include the 19<sup>th</sup> Century Flying Arch railway bridge (HER No.: MNT26481), the landscaped gardens at St Anne's Manor (HER No.: MNT26818), and numerous properties, the majority of which lie along Main Street to the NNW of the Site (HER Nos.: MNT23808; MNT23812; MNT23809; MNT23811; MNT23846; MNT20172; MNT23847; MNT23814; MNT20171; MNT23844; MNT23815; MNT23842; MNT23849), although a few others are sited along the adjoining roads of Pasture Lane and St. Anne's Lane (HER Nos.: MNT23810; MNT23841; MNT23843).

### 3.3.1 Cartographic evidence

Sutton Bonington developed as a 'linear' village, with the cartographic evidence showing the surrounding landscape as predominantly open fields prior to The Enclosure Act of 1773 (Stenson 2023).

The 1845 Tithe Map of the village shows the Site as largely occupying the NE end of Plot 3, a large rectangular field known as Greys Closes or Hall Closes, which the tithe apportionment records as being both owned and occupied by one John Bramley. The northern corner of the Site is also depicted partially extending into the grounds of Plot 4, recorded as Hobgoblin House and Garden, which represent part of the original Medieval grange; this was occupied by one John Whitby and was owned by William Dalby.

The 1<sup>st</sup> (1884) and 2<sup>nd</sup> (1900) Edition 25-inch Ordnance Survey (OS) maps show the Site itself as it was depicted on the earlier Tithe Map, although additional structures and land divisions are visible within the grounds of 'Hobgoblins' to the immediate NNW; extensive residential development has also taken place along Main Street around its junction with Hungry Lane, while the mid-19<sup>th</sup> Century Midland Railway line is shown running roughly parallel with Park Lane to the E of Site.

The 1921 Edition 25-inch OS map is the first to depict the original school building, which is shown as a rectangular block straddling two small enclosed plots that probably represent the former boys' and girls' classrooms; a small structure is also shown to the rear of the school, beyond which lies a roughly square field. The northern part of the Site is still depicted as being within the grounds of 'Hobgoblins', while residential development is visible expanding along Park Lane to the S.

Few changes to the Site are shown on the 1:25000 OS map of 1956 and the school in its current form did not emerge until the 1970s when the building was further extended to the rear and the grounds encompassed the former boundary of Hobgoblin House and Gardens.

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## 4 Aims

The ADBA (BA 2023a) assessed the archaeological potential of the site as **Moderate to High**, with particular reference to encountering archaeological remains associated with Repingdon Grange, a late Medieval monastic grange or manor farm that remained in use in various capacities up until the early 19<sup>th</sup> Century.

As such, the principal aim of the AO is to locate and record any archaeological finds, features or deposits within the groundworks area and to confirm that no impact on the archaeological resource occurs without the implementation of this proposed programme of archaeological work.

Furthermore, the work will aim to address specific areas of interest as set out in the *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight, Vyner & Allen 2012).

## 5 Methodology

The programme of archaeological work will be carried out in accordance with BA's *Archaeological Field Recording Manual* (2023c), *Standard and guidance for an archaeological watching brief* (ClfA 2020a), and *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (ClfA 2020b). BA adheres to the *ClfA Code of conduct* (2022) and is cognizant of project management advice set out in *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide* (Lee 2015).

ClfA states (2020a, 4) that the purpose of a watching brief (Archaeological Observation) is:

- a. *to allow, within the resources available, the preservation by record of archaeological deposits, the presence and nature of which could not be established (or established with sufficient accuracy) in advance of development or other potentially disruptive works;*
- b. *to provide an opportunity, if needed, for the watching archaeologist to signal to all interested parties, before the destruction of the material in question, that an archaeological find has been made for which the resources allocated to the watching brief itself are not sufficient to support treatment to a satisfactory and proper standard.*

### 5.1 Scheme of Works

All groundworks relating to the removal and replacement of the floor slab beneath the original schoolhouse, the demolition of the modern school building to its rear and the construction of the new two-storey building in its place, the installation of the temporary school building for use during the construction period, and all associated landscaping (*fig. 2*) will be carried out under archaeologically-controlled machine excavation, the works being undertaken with a toothless bucket on a tracked or wheeled excavator.



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All stripped material will be routinely checked for significant finds (where practicable) and, where necessary, work will be halted to define, examine, and record any areas of archaeological interest; these will be recorded both in plan and section, provided such deposits are safely accessible, with adequate time being allowed for the supervising archaeologist to do so.

If significant archaeological remains are identified, BA will inform Bowmer and Kirkland and the Planning Archaeologist immediately and any such areas of identified archaeology will be cordoned-off from plant movement pending archaeological investigation. Where archaeological deposits are identified for further investigation, exposed surfaces will be cleaned by hand and planned using Total Station (TS) and/or a survey grade Global Positioning System (GPS), where appropriate and practicable, prior to investigation and recording.

Within significant archaeological levels, excavation will proceed by hand to establish the date and character of any archaeological deposits or features and to undertake palaeoenvironmental sampling. Naturally occurring layers and features, such as peat, alluvium, geoarchaeological deposits and palaeochannels, will be investigated. This is particularly likely when the deposits contain well-preserved biological remains and/or were laid down during periods of archaeological interest.

A metal detector may be used throughout the programme as considered necessary. No unauthorised metal detecting will be permitted anywhere within the Site area and all such activity will be carried out in accordance with BA's *Metal Detecting Policy (2018)* incorporating Historic England and Portable Antiquities Scheme guidance.

All BA staff are suitably qualified and experienced to discharge their project roles effectively, are fully cognisant of aims and methodologies and are suitably equipped to undertake the work.

## 5.2 Recording

The following numbers have been assigned to this fieldwork project:

- Site Code: BPS23;
- OASIS ID: borderar1-518375;
- Museum Accession Number: TBC.

Full written, graphic, and photographic records will be made in accordance with BA's *Archaeological Field Recording Manual (2023c)* and paragraph 3.3.7 of *Standard and guidance for an archaeological watching brief (ClfA 2020a, 10)*.

Records will include:

- A *pro-forma* trench record for each trench excavated;
  - A *pro-forma* context record for each stratigraphic unit examined;
-

- A full graphic record of all excavated areas, with the primary record consisting of hand-drawn plans and sections (produced on gridded, archive-stable polyester film), to show the extent of the area, the extent of all stratigraphic units and appropriate detail within stratigraphic units. Plans will be produced at scales of 1:20 or 1:50 and sections at 1:10 or 1:20, depending on the complexity to be recorded. All levels will relate to Ordnance Datum. Drawings will be numbered and listed in a drawing register cross-referenced to the written record;
- Temporary Benchmarks (TBMs), which will be established as required;
- Survey using TS and/or survey-grade GPS where appropriate;
- A detailed photographic record of all stratigraphic units and representative photographs showing the progress of archaeological work. The record will be made using a high-resolution digital camera, comprising photographs of archaeological features and appropriate groups of features and structures. Included in each photograph will be an appropriate scale and all photographic records will be indexed and cross-referenced to written records. Details concerning subject and direction of view will be maintained in a photographic register, indexed by frame number.

### 5.3 Recovery, Processing & Curation of Artefactual Data

Finds are herein defined as...

*...all artefacts, building materials, industrial residues, environmental material, biological remains (including human remains) and decay products (ClfA 2020b, 3).*

In accordance with ClfA *Standard and guidance for the collection, documentation, conservation and research of archaeological materials* (2020b) and *First Aid for Finds* (Watkinson & Neal 2001), all such materials will be labelled with the Site Code and context number before being removed off-site. All such materials will be stored in accordance with *First Aid for Finds (ibid.)* and with Historic England technical standards and other relevant sources of information, including standards for data-gathering set out by Brown (2011a, 18-20).

Each retained assemblage will be examined according to typological or chronological criteria and conservation needs identified, with all ceramics referenced to the county type fabric series.

Kate Smith MA ACIfA, Post-Excavation Manager: Performance Delivery, will contact the nominated museum for any specific guidance requirements in respect of the collection and subsequent archiving of finds. Decisions regarding selection and retention of archaeological materials are generally made at the pre-analysis stage and informed by principles set out by Brown (2011a, 23), which in essence specify that the process should be sufficient...

*...to produce a project archive that allows a full re-examination and interpretation of all the results of the project whilst avoiding replication, repetition or the retention of materials not germane to future analysis.*

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BA refers additionally to *Selection, Retention and Dispersal of Archaeological Collections: Guidelines for use in England, Wales and Northern Ireland* (Society of Museum Archaeologists 1993) and the *ClfA Toolkit for Selecting Archaeological Archives* (2019). However, it is acknowledged that the 'Museum Services reserves the right to determine what material records should be retained in the archive to be transferred into the collections...' and that 'the museum reserves the right to decline or defer the acquisition of an archive which does not fulfil the Museum's acquisition policy and the standards set in this document' (Nottingham City Museums & Galleries n/d, 3-4).

### 5.3.1 Conservation requirements

Janice McLeish MA (Hons.) ACIfA, Director: Post Excavation Services, will supervise on-site conservation for the lifting and treatment of fragile objects.

Post-excavation conservation work, including cleaning sensitive finds, will be carried out by BA's conservator and/or York Archaeological Trust (YAT).

Finds will be appropriately packaged and stored under the direction of BA's on-site conservation specialist. X-ray photographs of archaeological metalwork will be produced off-site by YAT.

### 5.3.2 Treasure

All finds identified in the Treasure Act (1996) and the Treasure (Designation) Order (2002) as being treasure will be recorded, removed to a safe place, and reported to Bowmer and Kirkland, the Planning Archaeologist, the Finds Liaison Officer (FLO) and Coroner. If the finds cannot be removed from Site the same day as discovery, provision against theft will be taken. A Treasure Receipt will be completed and a report submitted to the Coroner's Office and the FLO within 14 days of understanding the find is Treasure. The Treasure Receipt and Report will include the date and circumstances of the discovery, the identity of the finder (put as unit/contractor) and (as exactly as possible) the location of the find.

## 5.4 Recovery & Assessment of Palaeoenvironmental/Palaeoeconomic Data

Samples for palaeoenvironmental/palaeoeconomic purposes will be collected according to guidance set out in *Environmental Archaeology: A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (2<sup>nd</sup> Edition; Campbell *et al.* 2011). Where possible, results will be related to themes identified in *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight, Vyner & Allen 2012).

Processing will be undertaken by BA at its Palaeoenvironmental Processing Facility under the supervision and direction of Amy Bunce BSc MA MCIfA, Director: UK Operations & Palaeoenvironmental Sciences. This assists on-

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site guidance for sampling purposes and the ability to quickly determine the archaeoenvironmental potential of samples; this will inform whether additional samples are taken.

Wherever practicable, at least 40% or 100% of each sample (both dry and waterlogged) will be processed by flotation using Siraf-style tanks with a 500µm retent mesh and 250µm flot sieve as standard, with smaller retent meshes to 250µm considered where carbonised material is less likely to float. Heavily waterlogged samples will be considered for analysis without prior processing by flotation.

Retents will be initially scanned by magnet to retrieve archaeometallurgical debris such as flake and/or spheroidal hammerscale. A sieve bank will be used to facilitate visual sorting with the smaller fractions sorted by means of magnifying lamp and/or illuminated stereo zoom microscopy. Non-archaeological, non-archaeobotanical, non-archaeoosteological and non-archaeometallurgical material will be disposed of on site. Retents that are particularly rich in carbonised material may be re-floated once dry to assist the separation of archaeobotanical material.

Flots will be sorted using an illuminated stereo zoom microscope, which will have a trinocular head for digital microscopic photography where necessary. Charcoal will only be subjected to species identification where the contextual information suggests it would be advantageous in addressing aims set out in the county and regional research frameworks or in terms of national research strategies. Archaeological, archaeobotanical, archaeoosteological and archaeometallurgical material from flot and retent will be retained as part of the site assemblage.

Sorting and identification of macro-botanical remains will use an in-house reference collection of botanical material in conjunction with the consultation of academic, specialist reference books.

#### 5.4.1 Other environmental sampling

Other environmental sampling, *e.g.*, coring and monoliths for pollen, foraminifera, testate amoeba, diatoms etc., will be undertaken under the guidance of the specialist carrying out the further analysis.

Residue analysis on materials such as ceramics will be advised by the finds department.

Further investigation of environmental material, *e.g.*, isotope analysis on bone or teeth, will be dependent on national research strategies; this will be considered as part of the post-excavation analysis stage.

#### 5.4.2 Waterlogged wood

Waterlogged wood will be treated in accordance with *Waterlogged Wood Guidelines on the recording, sampling, conservation and curation of waterlogged wood* (Brunner & Watson 2010) and left *in situ* where this is practical and its long-term preservation is achievable.

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#### 5.4.3 Sampling for scientific purposes

A range of scientific dating methods will be employed, as appropriate. In addition to techniques such as  $^{14}\text{C}$  and dendrochronology, dating methods applied to inorganic materials exposed to firing or burning may be used, *e.g.*, thermo-luminescence for ceramics, flint artefacts and hearth stones, and archaeomagnetic dating for fired structural remains, such as furnaces and kilns and possibly domestic hearths and ovens.

#### 5.4.4 Building materials

Samples of construction materials including masonry, brick, roof tile, floor tile, wall tile and hypocaust elements will be recovered for assessment of their potential to assist in the analysis of building palaeotechnology.

#### 5.4.5 Geoarchaeology

Buried soils and sediment sequences considered to reflect the pedology of the Site will be analysed for information on Site formation processes. Highly significant, well-preserved remains, when encountered, will be investigated in a considered manner in order to assess the archaeological stratigraphy. Geoarchaeological works will in general aim to understand how deposits were initially laid down and subsequently modified through time (Canti & Corcoran 2015).

### 5.5 Human Remains

Should human remains be discovered, BA will inform the Planning Archaeologist and Bowmer and Kirkland, the remains being covered, protected, and left *in situ* in the first instance, although graves will be scanned by metal detector to assess whether any grave objects are likely to be present.

BA is cognisant of the deliberations by the Ministry of Justice (MoJ) in 2011 in respect of Section 25 of the Burial Act 1857 (Amended 2018) and any arrangements regarding the discovery of human remains will be at the discretion of HM Coroner, whose instructions/permission will be sought.

Any recording of such remains will be in accordance with *Updated Guidelines to the Standards for Recording Human Remains* (Mitchell & Brickley 2017) using BA's *pro-forma* Skeleton Recording Sheet and Coffin Recording Sheet.

Should removal of remains be required, this would be carried out under the supervision of BA's osteology specialist Dr. Catherine Sinnott MA PhD ACIfA, subject to the appropriate MoJ licence, environmental health regulations and coroner information, with adequate security provided. Assessment and analysis, where required, will be undertaken by the osteology specialist and will include a statement for the final deposition of the assemblage, together with options for reburial.

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Human bone assemblages are treated at all times with due reverence and in accordance with the following guidelines:

- *Excavation and post-excavation treatment of cremated and inhumed human remains* (McKinley & Roberts 1993);
- *Guidelines to the Standards for Recording Human Remains* (Brickley & McKinley 2004);
- *Human Bones from Archaeological Sites: Guidelines for producing assessment documents and analytical reports* (Mays, Brickley & Dodwell 2004);
- *Science and the Dead: A guideline for the destructive sampling of archaeological human remains for scientific analysis* (APABE; Mays et al. 2013);
- *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England* (2<sup>nd</sup> Edition; APABE; Mays 2017);
- *Updated Guidelines to the Standards for Recording Human Remains* (Mitchell & Brickley 2017);
- *The Role of the Human Osteologist in an Archaeological Fieldwork Project* (Mays, Brickley, Dodwell & Sidell, 2018);
- *Burial Law and Policy in the 21<sup>st</sup> Century: The way forward* (MoJ 2007);
- *Statement on the exhumation of human remains for archaeological purposes* (MoJ 2011).

Where analysis of remains is undertaken, arrangements will be made for re-interment in full consultation with all relevant parties. Health and safety measures with regard to disease are strictly adhered to.

Where appropriate, the results of any osteological analysis may be submitted to Historic England for inclusion on the database of human skeletal remains.

## 5.6 Public Engagement

Elements of public engagement, benefit and dissemination will be dependent on whether significant archaeological remains are found. Where remains of substantial interest are identified, there may be a need to formulate a project design which includes further engagement, publicity, and publication. This would be agreed with BA, Bowmer and Kirkland and the Planning Archaeologist.

## 6 Archive Review & Post-Excavation Assessment

An Archive Review will be completed by the Site manager upon completion of Site works to comprise an audit of all archaeological materials recovered. Dependent upon the fieldwork results, assessment of the nature, date, and significance of the stratigraphic, artefactual and palaeoenvironmental evidence may be undertaken by BA's nominated specialists, as detailed in the Appendix to this document. This will be consistent with Section 3.4 of *Standard and guidance for an archaeological watching brief* (ClfA 2020a, 11). Results will be placed in a local and regional context and address, where possible, specific research themes and priorities identified in *East Midlands*

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*Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands* (Knight, Vyner & Allen 2012).

Where it has been agreed in consultation with the Planning Archaeologist, materials identified at assessment as appropriate for further analysis will be processed by the relevant specialists and the resultant research archive will be checked and ordered according to *MoRPHE* criteria (Lee 2015). Any such additional analysis will be undertaken by suitable specialists as part of an Updated Project Design (UPD) to inform eventual publication. The UPD if required will be submitted to the Planning Archaeologist.

## 7 Archive Preparation

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All records created during fieldwork will be checked for consistency and accuracy and will form part of the site archive. The archive will contain all data collected, including records, ecofacts, artefacts and other specialist materials, and will be ordered, indexed, adequately documented, internally consistent, secure, quantified, conforming to standards required by the archive repository, and signposted appropriately to ensure future use in research, as detailed in the *MoRPHE Project Managers' Guide* (Lee 2015).

The archive will be assembled in accordance with specific deposition guidelines set out in *The Preparation of Archaeological Archives for Deposition with Nottingham City Museums & Galleries* (Nottingham City Museums & Galleries n/d) and with guidance issued in *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives* (ClfA 2020c), *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990), *Standards in the museum care of archaeological collections* (Paine 1992), *Selection, Retention and Dispersal of Archaeological Collections: Guidelines for use in England, Wales and Northern Ireland* (Society of Museum Archaeologists 1993), *Archaeological Archives: A guide to best practice in creation, compilation, transfer and curation* (Brown 2011a), *Safeguarding Archaeological Information: Procedures for minimizing risk to undeposited archaeological archives* (Brown 2011b) and *Toolkit for Selecting Archaeological Archives* (ClfA 2019).

BA undertakes that the following issues will be addressed and concluded to the satisfaction of the Planning Archaeologist within a reasonably defined timescale:

- The written, drawn, and photographic records will be of sufficient quality to facilitate publication in an appropriate specialist journal;
- Data concerning complete identifiable and itemised objects will be transferred to specified object record sheets.

A Museum Accession Number will be requested by Kate Smith MA ACIfA and processed assemblages will be boxed according to the museum guidelines. A register of contents will be compiled prior to deposition of the Project Archive and the client will be consulted, where applicable, for permission for the transfer of title to any artefacts

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discovered to the Museums Service. An OASIS (Online Access to the Index of Archaeological Investigations) data-capture form will be completed upon deposition of the final archive.

The project archive will be presented to Nottingham City Museums & Galleries following completion of the reporting process, subject to the agreement of the Site owner with regards to any finds and availability of the appointed specialists. Digital archiving will be via the Archaeology Data Service.

## 8 The Report

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The specific requirements of the Report will necessarily vary according to the scope of works, the nature of the results and/or other factors (ClfA 2020a, 14); however, it will include the following sections and illustrative components:

- Non-technical Summary;
- Introductory statements;
- Aims & Objectives;
- Methodology;
- Results & Discussion;
- Conclusions (considering, where appropriate, the results of archaeological projects undertaken in the wider area);
- Archive location;
- Appendices providing detailed context records & the results of all specialist assessment and analysis undertaken;
- Location plans based on the current Ordnance Survey at an appropriate scale (reproduced with the permission of the Controller of HMSO);
- Plans showing; the Ordnance Survey Grid; site survey stations; the location of the Ordnance Survey Benchmarks used during the fieldwork and the site of Temporary Bench Marks;
- Plans showing the extent of identified archaeology;
- Illustrations including plans and sections of features recorded;
- Photographs of principal finds and features;
- References.

Where geoarchaeological investigation is undertaken, a separate report will be compiled by the nominated specialist for submission as an appendix to the Report. Included also would be the borehole logs resulting from any geotechnical investigations carried out on the site.

A digital copy of the report in PDF/A format will be sent to Bowmer and Kirkland and the Planning Archaeologist for approval, whereupon one digital copy will be formally submitted to the Nottinghamshire HER. A digital copy will also be deposited with OASIS (<http://www.oasis.ac.uk/>) the Archaeology Data Service Access to the Index of Archaeological Investigations website.

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Dependent upon discovery and where applicable, a summary report (including illustrations, where appropriate) will be submitted to the editor of the *Transactions of the Thoroton Society of Nottinghamshire* and any relevant period journals, such as *Medieval Archaeology* or *Proceedings of the Prehistoric Society*, for wider dissemination.

## 9 Staffing & Timescales

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Amy Bunce BSc MA MCI<sup>f</sup>A will be responsible for project management and staff deployment with support from Lyndsey Clark BSc (Hons.) MCI<sup>f</sup>A. George Children MA MCI<sup>f</sup>A, Director: Quality and Compliance, will additionally provide overall technical and editorial guidance to all constituent aspects of the works programme.

## 10 Border Archaeology Operating Standards & Arrangements

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All projects are carried out in accordance with the Company's *Archaeological Field Recording Manual* (2023c) and with *CI<sup>f</sup>A Standards and guidance* (2020a; 2020b; 2020c).

A pre-works risk assessment will be completed and lodged in the Site Health & Safety File and site reporting procedures are completed daily.

George Children MA MCI<sup>f</sup>A retains overall responsibility for the qualitative elements of the project.

## 11 Monitoring

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The Site will be subject to monitoring by the Planning Archaeologist who will monitor the progress of the work and will undertake at least one site visit unless otherwise agreed. BA will advise the Planning Archaeologist of the project's progress on a regular basis and notify them at the earliest opportunity of any unexpected discoveries, especially where there may be a need to vary the project. All issues of a technical nature should be addressed in the first instance to Amy Bunce BSc MA MCI<sup>f</sup>A.

## 12 Copyright

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Border Archaeology Ltd shall retain full copyright of any commissioned reports, tender documents or other project documents, under the Copyright, Designs and Patents Act 1988, with all rights reserved, excepting that it hereby provides a licence to Bowmer and Kirkland, Rushcliffe Borough Council and Nottinghamshire County Council for the use of the report by Bowmer and Kirkland, Rushcliffe Borough Council and Nottinghamshire County Council in all matters directly relating to the project as described in the Project Specification to use the documentation for their statutory functions and to provide copies of it to third parties as an incidental to such functions.

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## 14 Appendix: Specialists

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The following specialists have been appointed to provide, where required, sampling, consulting, analysis & reporting services:

1. Geoarchaeology: Rob Batchelor BSc PhD MCI<sup>f</sup>A Director Quest University of Reading; ARCA, University of Winchester;
2. Pottery: Alex Gibson BA PhD MCI<sup>f</sup>A University of Bradford, Rob Perrin M.Litt MCI<sup>f</sup>A FSA Freelance Specialist, Jo Mills Freelance Specialist, Paul Blinkhorn B<sup>Tech</sup> (Hons) Freelance Specialist;
3. Coins: Peter Guest BA PhD University of Cardiff;
4. Flint: Rebecca Devaney MA ACI<sup>f</sup>A Freelance Specialist;
5. Petrological Analysis: Imogen Wood BA MA PhD;
6. Glass: Nicola Powell MA MCI<sup>f</sup>A Freelance Specialist;
7. Clay Tobacco Pipes: Nicola Powell MA MCI<sup>f</sup>A Freelance Specialist;
8. Leather and Metal Objects: Quita Mould Barbican Research Associates;
9. Archaeometallurgy: Gerry McDonnell BSc PhD Gerry McDonnell Archaeometals;
10. Glass Working: John Shepherd BA FSA MCI<sup>f</sup>A Freelance Specialist;
11. Artefact & Materials Conservation: Ian Panter York Archaeological Trust;
12. Building Materials: Phil Mills BSc PhD MCI<sup>f</sup>A Freelance Specialist;
13. Worked Stone: Ruth Shaffrey BA PhD MCI<sup>f</sup>A Freelance Specialist;
14. On-Site Conservation: Janice McLeish MA ACI<sup>f</sup>A Border Archaeology Ltd;
15. Faunal Remains: Chris Faine MA ACI<sup>f</sup>A Freelance Specialist & Janice McLeish MA ACI<sup>f</sup>A Director: Post Excavation Services Border Archaeology Ltd & Clare Rainsford Freelance Specialist;
16. Human Remains: Catherine Sinnott BA PhD ACI<sup>f</sup>A Osteoarchaeologist Border Archaeology Ltd;
17. Archaeobotanical, Charcoal & Wood ID: Amy Bunce BSc MA MCI<sup>f</sup>A Director: UK Operations & Palaeoenvironmental Sciences Border Archaeology Ltd.

Other specialist suppliers will be sourced, if deemed appropriate; suitable management time will be expended to ensure that such external suppliers' work complies with accepted national guidance.

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Editing	Amy Bunce BSc MA MCI fA		
Artwork	Holly Litherland BA (Hons.)		
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