East West Rail Phase 2

Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: A Written Scheme of Investigation for Archaeological Strip, Map and Sample

Rev B01

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Notice

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Executive summary

This document is a Written Scheme of Investigation (WSI) setting out a methodology for an archaeological strip, map and sample (SMS) at land east of Bicester Road, Bicester, Oxfordshire (NGR SP 60307 23155) ('the Site'). The site is required for the construction of a compound, ahead of the construction of East West Rail and lies within the local authority administrative area of Cherwell District.

The archaeological SMS is being undertaken as part of a phase of archaeological works at the Site. A geophysical magnetometry survey and evaluation have been undertaken. The evaluation, conducted in April/May 2019, identification several Romano-British features. The proposed development includes below ground works associated with the construction of the compound, which will directly impact further archaeological remains. As such, an area of 4.1ha will be subject to the archaeological SMS.

This WSI sets out the scope and methodology for an archaeological SMS which is being undertaken as part of a planning application for temporary planning permission as once the construction works have been completed the Site will revert to its previous use.

1. Introduction

This Written Scheme of Investigation (WSI) sets out the methodology for an archaeological strip, map and sample (SMS) at land east of Bicester Road, Bicester, Oxfordshire (NGR SP 60307 23155) ('the Site'), required for works associated with the construction of the East West Rail (EWR) Phase 2 scheme. The Site is required for the construction of a compound (Appendix A, Figure 1). The Site lies within the local authority administrative area of Cherwell District. Archaeological advice to the council is provided by Richard Oram, Planning Archaeologist for Oxfordshire County Council.

The proposed work will directly impact buried archaeological remains. The archaeological SMS is being undertaken as a result of the identification of several Romano-British features encountered during a phase of evaluation works conducted in April/May 2019[1]. The proposed work comprises ground breaking works associated with the construction of a compound.

This WSI sets out the scope and methodology for an archaeological SMS to fulfil a Condition of the granted temporary planning permission for the Site (Application Ref: 19/00607/F). All works will be undertaken by a team of professional archaeologists and will be recorded using current Chartered Institute of Archaeologists (CIfA) standards.

2. Project Background

The local planning authority is Cherwell District Council. Archaeological advice to the Council is provided by Richard Oram, Planning Archaeologist for Oxfordshire County Council.

The Site is intended to be utilised as a main works compound. The works will involve disturbance to the ground, which has the potential to truncate or remove archaeological deposits, should further remains be present within the Site.

A Transport and Works Act Order application was submitted in July 2018 for the construction, operation and maintenance of an upgraded and reinstated rail link between Bicester-Bletchley-Bedford and Aylesbury-Claydon Junction, as well as the construction of new railway infrastructure (including new overbridges, footbridges, a new station and station platforms) and improvements to existing infrastructure (such as platform extensions). However, as the compound site is required at the start of the construction programme and requires the existing trackside and adjacent vegetation to be cleared before construction work can begin on upgrading the railway track bed to the required width and standard, a planning application is required[2].

This WSI has been prepared on behalf of East West Rail Alliance and is required to fulfil a Condition of the granted temporary planning permission for the Site (Application Ref: 19/00607/F). Condition 15 states:

> *'Prior to any demolition and commencement of the development, a professional archaeological organisation acceptable to the local planning authority shall prepare an Archaeological Written Scheme of Investigation, relating to the application site area, which shall be submitted to and approved in writing by the Local planning Authority.*

[1] EWR Alliance, 2019. *Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: An Archaeological Evaluation Report.* Unpublished report.
[2] EWR Alliance, 2019. *Planning Statement: Temporary use of land as a construction compound incorporating storage area, site offices and car parking. Compound A1: Land North East of Charbridge Lane. April 2019.* Unpublished report.

Reason - To safeguard the recording of archaeological matters within the site and to comply with Government guidance within the National Planning Policy Framework.'

This WSI details the methods and standards to which the archaeological investigations will be undertaken and has been designed in accordance with current best archaeological practice and local and national standards and guidelines[3].

3. Site Location, Geology and Topography

The Site comprises an irregular, roughly triangular, parcel of land of approximately 4.8 hectares (ha) located on the eastern periphery of Bicester. The Site is currently largely open pasture and consists of a single field. The Site is enclosed by a belt of tree planting to the north of the modern railway which forms the southern boundary. The northern, western and eastern Site boundaries are defined by hedgerows. Apart from the railway to the south and Bicester Road to the west, the Site is surrounded by further agricultural land, a mixture of arable and pasture fields.

The Site is located on the eastern side of Bicester. It lies at approximately 69m OD. The underlying bedrock geology throughout the Site is mapped as Kellaways Sand Member[4] overlain with Alluvial deposits to the north of the site. The Site is currently in agricultural use.

4. Archaeological and Historical Background

A Heritage Appraisal was produced as part on going works associated with EWR2[5] and identified whether heritage assets where present within the Site, or within a 250m Study Area around the Site. No designated heritage assets were identified within the Site boundary. A phase of archaeological evaluation by trial trenching was conducted within the Site from April to May 2019[6]. A number of archaeological features were identified within the Site, the results of which are incorporated into the following summary:

Prehistoric (500,000 BC – AD 43)

Within the wider landscape Palaeolithic sites appear to be associated with rivers or other bodies of water, which may suggest a reason for the absence of Palaeolithic activity within the vicinity of the Site. There are also no records of assets dating to the Mesolithic period within the immediate vicinity of the Site. There have, however, been several lithic scatters found in archaeological investigations in the vicinity of the Site near Bicester but only isolated regular flint flakes of possible Mesolithic or early Neolithic date were recovered from features during the evaluation phase of works, one from a ditch in the south-west of the Site and a pit in the central part of the Site.

[3] Chartered Institute for Archaeologists (CIfA) (2014a). *Code of Conduct*; Chartered Institute for Archaeologists (2014b). *Standard and guidance for archaeological field evaluation*; Ministry of Housing, Communities and Local Government (MHCLG) (2019). *National Planning Policy Framework* (NPPF); Historic England (HE) (2015). *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide.*
[4] British Geological Survey, 2019. *Geology of Britain.* Available at: https://www.bgs.ac.uk/. Accessed: 18 September 2019.
[5] EWR Alliance, 2018. *Heritage Appraisal.*
[6] EWR Alliance, 2019. *Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: An Archaeological Evaluation Report.* Unpublished report.

There is little evidence in the area from the Neolithic period. There is an observable bias in Bronze Age occupation towards Milton Keynes and Aylesbury and as a result, Bronze Age remains within the region are primarily focused within the Ouzel river valley, c. 50km to the east between Bletchley and Leighton Buzzard. Bronze Age barrows have been recorded as cropmarks on aerial photographs within the area and a number of later prehistoric enclosures have also been recorded. However, no features or artefacts encountered during the archaeological evaluation works were confirmed as dating to date to these periods

The Oxfordshire landscape was extensively cleared of woodland by the middle/late Iron Age as evidenced from sites across the county. The evaluation by trial trenching undertaken from April to May 2019 resulted in the discovery of a number of archaeological features including a pit containing a Late Iron Age pottery rim, associated with an abraded daub fragment, and two ditches with Late Iron Age pottery sherds. A pit with six sherds of residual late Iron Age pottery was also encountered. These remains suggest land management or agricultural activity e.g. land divisions, fields and paddocks related to this period although the activity appears to be peripheral with any Iron Age domestic areas likely to be to the immediate south of the Site.

Romano-British (AD 43 – AD 410)

Several features which were identified and recorded during the archaeological evaluation were dated to the Roman-British period. Ten features were found to contain material dating to the Roman period. This included boundary or enclosure ditches and pits containing Romano-British pottery fragments as well as Roman tegula. Analysis of the environmental remains encountered during the evaluation indicate a paucity of charred plant remains and charcoal associated with the excavated features. This suggests that while Romano-British activity took place within the Site, the area was located away from the foci of more domestic activities.

The remains indicate land management or agricultural activity was taking place within the Site during the Romano-British period, possibly related to an area of archaeological interest with the compound located immediately north of an area of probable Iron Age and Roman settlement identified during road construction. Further Iron Age and Roman sites have been recorded in the area including a settlement site 600m to the south. It is likely that continuations of several of the Romano-British features will be encountered during the SMS as well as other previously unidentified features such as pits and further ditches. None of these features were identified during a geophysical survey of the Site undertaken in 2017.[7]

Early Medieval (AD 410 – AD 1066)

No evidence for early medieval activity other than agricultural activity was encountered during the archaeological evaluation. The Site lies directly to the east of Bicester and the modern settlement of Bicester evolved with either side of a ford over the River Bure and close to the Saxon Minster of St Edburg's. The first group of farms were established in the vicinity of what became the Manor of King's End followed by a later settlement on the east side of the Bure which became the Manor of Market End.

The remains of two, well-preserved, windmills of likely medieval date reportedly survive to the west of the Site; however, no evidence related to the windmills was encountered during the evaluation.

Late Medieval (AD 1066 – AD 1540)

It seems probable that the Site would have been in use as agricultural land during this period. No evidence of late medieval activity was recorded during the evaluation works other than the remains of linear features related to extant ridge and furrow which may be late medieval in date.

[7] Sumo Services Ltd., 2017. *Geophysical Survey Report: East West Rail. Job Reference: 11797.* Unpublished client report.

Post-Medieval (AD1540 – c.1750) and Industrial Period (c.1750 – 1901)

The Site continued to be in use as agricultural land in the post medieval period; the remains of extant ridge and furrow, drainage and field boundaries were recorded during the evaluation works. A single post-medieval tile was recovered from a ditch in the centre of the Site. The line of the existing railway runs along the southern boundary of the Site, which first opened in the mid-19th century.

Modern Period (Post-1901)

Maps show that there was very little change in the Site and wider area, with the landscape remaining rural agricultural in nature. As part of the modern development and expansion of Bicester, modern and larger road schemes have replaced earlier routes and new industrial parks have been created to the west and north of the Site. Open fields remain to the east and northeast.

Historic Landscape Character

The present character of the Site can be defined as probable 18th-19th century enclosure and 20th century prairie fields, interrupted by the 19th century railway line.

5. Aims of the Work

The SMS will aim to determine, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. All works will link into the existing archaeological research framework for the area; the *Solent-Thames Research Framework for the Historic Environment Assessments and Research Agendas*[8].

The general aims of the investigation are defined as being:

- To establish the presence/absence and significance of further archaeological remains within the Site.
- To determine the extent, condition, nature, character, quality and date of any archaeological remains encountered.
- To record and sample or fully excavate any archaeological remains encountered.
- To assess and sample, where possible, the eco-factual and environmental remains of any archaeological features and deposits.
- To assess and sample, where possible, any palaeoenvironmental remains within the Site.
- To determine the extent of previous truncations of the archaeological deposits.
- To make available to interested parties the results of the investigation.

The specific aims of the strip, map and record are defined as being:

- To establish the extent of evidence for pre-Romano-British and Romano-British land management and agricultural activity within the Site.
- To establish whether evidence of Iron Age or Romano-British settlement is present and what that tells us about the nature of occupation within the Site.

[8] Hey, G. and Hind, J. (2014) *Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas*. Project Report. Oxford Wessex.

- To investigate the continuity of land use within the Site from the Iron Age to the Romano-British period
- To establish the presence of any further archaeological features within the Site.

6. Scope of Works and Strategy

The SMS will focus on an area where archaeological features were found to be concentrated within the Site, as identified by the evaluation. The evaluation indicated that any groundworks within those areas are likely to expose or remove archaeological remains; as such, they would be subject to the strip, map and record.

An area of c. 4.1 ha will be subject to SMS, focussing on the southern part of the Site in particular. The SMS will be conducted in three stages. Area 1 (c. 1.5 ha), in the south-west of the Site, will be stripped first to allow for site access; following this, Area 2 (c. 1.9 ha) in the east of the Site will be stripped; and finally, Area 3 (0.7 ha) which will be stripped following the removal of a temporary compound (Appendix A, Figure 1) . This scope of works has been agreed with Richard Oram, Planning Archaeologist for Oxfordshire County Council.

The archaeological SMS and subsequent post-excavation will conform to current best archaeological practice and local and national standards and guidelines[9].

Insurances, copyright and confidentiality and standards are defined in Appendix B.

A unique site code for the project will be created and this will be used as the site identifier for all records produced. An accession number will also be applied for from Oxfordshire Museum Services.

The fieldwork and reporting will be undertaken by AOC Archaeology on behalf of EWR Alliance. The work will be managed by Melissa Melikian. The field team will consist of experienced archaeologists; CV's of which can be supplied upon request.

7. Archaeological Strip, Map and Sample Methodology

Service plans have been provided for the Site. Two Gas Mains (one High and one Medium Pressure) with 15m Exclusion are located in the southern area of the field, but outside of the Site. Both run parallel to the railway, roughly east to west across the Site. No known services are present within the Site. The area will be CAT scanned prior to any excavation.

All topsoil stripping will be monitored and directed by the supervising archaeologist. Archaeological supervision of topsoil stripping will be at a ratio of one archaeologist per mechanical excavator. Topsoil and overburden will be

[9] Campbell, Moffett and Straker (2011) *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation;* Chartered Institute for Institute for Archaeologists (ClfA 2014a). *Code of Conduct*; Chartered Institute for Archaeologists (2014b). *Standard and guidance for archaeological field evaluation.* Historic England (2015). *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers' Guide;* Museum of London (1994). *Archaeological Site Manual (Third Edition);* Watkinson, D and Neal, V (2001). *First Aid for Finds;* United Kingdom Institute for Conservation (UKIC) (1990). *Guidance for Archaeological Conservation Practice.*

removed in successive level spits down to the first archaeological horizon, or the natural sub-stratum, whichever is encountered first. At this point, ground works will cease while archaeological recording is carried out.

The removal of topsoil and overburden will be carried out with mechanical excavators utilising a flat bladed bucket (toothless), and in horizontal spits. Plant will work away from, and not track across, the machined surface until the monitoring archaeologist has given permission to do so. Movement of plant over the remainder of the Site will be minimised to prevent rutting or damage to sub-surface archaeological features as far as is practicable. Topsoil and subsoil will be stored separately and will be visually scanned.

All investigation of archaeological horizons will be by hand, with cleaning, inspection, and recording both in plan and section. Any works regarding soil management will adhere to the site-specific Soil Management Plan[10].

The final excavation sample will be agreed following the site visit, however the minimum requirements for sample excavation in line with Historic England guidelines[11] are stated below, unless otherwise agreed with the Planning Archaeologist for Oxfordshire County Council:

Table 7-1 Minimum requirements for sample excavation

Type of Remains	Requirement for sample excavation
Complex/ very significant features/ deposits/ artefact assemblages/ artefacts	Sampling to be subject of further discussion with the Richard Oram Planning Archaeologist for Oxfordshire County Council. If of exceptional nature, the advice of Historic England may be sought.
Hearths, ovens, kilns	50-100% of domestic/industrial working features (hearths, ovens). Also to be sampled for arch/mag as standard if appropriate (this applies to any in-situ burnt features unless agreed otherwise on site following discussion). Palaeoenvironmental sampling to be agreed with the Planning Archaeologist.
Possible prehistoric roundhouses or other post-built structures	Total excavation of all post-holes, spreads/ occupation layers and cut features (e.g. ring-gullies) directly associated with structures. Metal detector to be used at all stages of excavation/ removal, for better artefact recovery (e.g. for droplets of bronze).
Possible cremation burials	Total excavation; lifting of intact/ semi-intact pottery vessels with following micro-excavation in laboratory.
Linear features	Excavation by hand of sections across all termini, all junctions or intersections of cut features and, in the body of the features (if datable, ancient and manifestly rich in ancient palaeoenvironmental remains, the following scope of works: 10% of each linear feature's exposed area Partial excavations within a linear at junctions of cut features will not be a substitute for sections across the body of the linear, away from such junctions, because of possible contamination between intercutting contexts. With prior agreement with the Planning Archaeologist, the remainder of

[10] East West Rail Alliance (2019) *East West Rail Phase 2. Compound A1. Soil Management Plan.*
[11] Campbell, Moffett and Straker (2011) *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*

	the fills may be excavated mechanically under close archaeological supervision and control and thorough metal detecting
Discrete cut features general	Total excavation by hand of all discrete datable and ancient cut features of less than 2 sq. metres plan area, and such features manifestly rich in ancient palaeoenvironmental remains; except where deeper than 1 metre, when half-sections will be acceptable. Metal detector to be used at all stages of excavation/ removal, for better artefact recovery.
Post-holes	Post-holes probably associated with structures - complete excavation by hand. Otherwise a 50% sample will be undertaken of isolated post holes.
Pits	Default - half-section. Further sampling to be decided on basis of Health & Safety considerations/ vulnerability of fill/ contents.
Structural Features	All structural features will be fully revealed in plan and recorded. All individual elements including walls, floors, doorways, and any negative features will have context boundaries distinguished facilitating a full written, drawn and photographic record. Negative structural features (beamslots etc) will be 50% sampled.
Demonstrably 19th/ 20th-century features	If not evidently part of a structure, e.g. a structure of industrial archaeological interest, or if without good artefact assemblage, record and sample only that sufficient to confirm late date. If artefact-rich/ part of a structure, treat as with pits and post-holes above.
Highly/nationally significant features (e.g. high-status burials)	Developer and Planning Archaeologist to be notified immediately on discovery/recognition. Strategy for excavation/scientific investigation/conservation etc to be agreed before work resumes.

A sampling strategy appropriate to the archaeological features and deposits will be adopted. This will include bulk samples for most archaeological contexts as well as provision for column and other necessary sampling. Bulk samples will be taken using ten litre plastic, lidded tubs (with handles) or securely fastened strong polythene bags (double bagged). All sample tubs/bags will be appropriately and clearly labelled with site codes, context details and sample information using permanent ink.

Bulk samples of dry context will be taken in the range of 40-60 litres as appropriate. Samples of wet (i.e. waterlogged) deposits should total 20L. Where the context is of a lower volume, 100% of the context will be sampled.

Monolith and kubiena box samples should be taken where necessary to allow for specialist analysis of deposits. The location and depth should be accurately recorded, and all samples should be taken with a 50mm overlap where more than one monolith is required. Column samples should also be taken down the length of a section where appropriate. These samples should be neatly packed and secured with plastic and rubber bands. All samples will be appropriately and clearly labelled with site codes, context details and sample information using permanent ink.

In waterlogged conditions, it is possible that timbers will survive below ground. Where there is potential for timbers to be dated, they should be sampled following Historic England guidelines.[12]

All samples will be recorded in a sample register forming part of the site record.

The Contractor will be responsible for the safekeeping of all samples on-site and during transportation to the processing facility.

EWR Alliance will be informed as soon as possible of the discovery of any unexpected archaeological remains or changes in the programme of ground works on Site.

Linear features and occasional discreet features will be located using a Trimble R8 GNSS GPS and tied into the National Grid. Where complex features or groups of features are encountered, these will be recorded at a scale of 1:20 on planning sheets based on a 5m grid system. The grid will be used for planning features and all other horizontal control on site. Vertical control will be established from the nearest Ordnance Survey bench mark (OSBM), with the traverse completed as part of a closed loop. Temporary benchmarks will be established across the site, as required.

Archaeological recording, where not precluded by Health & Safety considerations, will consist of:

- Planning of all exposed archaeological features and horizons (including boundaries of natural) at an appropriate scale. 1:50 will be utilised to initially map the entire exposure and linked to detail plans at 1:20 of excavated features.
- Limited hand cleaning of archaeological sections and surfaces sufficient to establish the stratigraphic sequence exposed.
- Excavated material will be examined in order to retrieve artefacts to assist in the analysis of their spatial distribution.
- A scaled photographic record of representative exposed sections and surfaces, along with sufficient photographs to establish the setting and scale of the groundworks.
- A record of the datum levels of archaeological deposits.

The SMS area and all features will be excavated only to a safe working depth, although they potentially will be stepped if required. The excavated area will be secured with road pins and barrier mesh, if required.

Records will be produced using either pro-forma context sheets compatible with those published by the Museum of London,[13] and features will be planned according to the single context method.

A full photographic record will be maintained using a digital SLR camera to produce RAW and JPEG images.

A record of the full sequence of all archaeological deposits as revealed in the SMS will be made. Plans and sections of features will be drawn at an appropriate scale of 1:10 or 1:20, with sections drawn at 1:10.

[12] Historic England, 2010. *Waterlogged Wood: Guidelines to the Recording, Sampling, Conservation and Curation of Waterlogged Wood*.
[13] MoL,1994. *Archaeological Site Manual (Third Edition)*

Bulk samples, 20L for wet and 40L for dry contexts of will be taken from appropriate contexts for the recovery and assessment of environmental data. Provision will be made for column and other appropriate samples to be taken. Sampling methods will follow Historic England guidelines.[14]

A metal detector will be made available on site to aid in the recovery of artefacts if required. The detector will not be set to discriminate against iron.

Any finds of human remains will be left *in situ*, covered and protected and the coroner will be informed immediately. If removal is essential a Licence will be sought from the Home Office. The Oxfordshire County Council Archaeological Officer will be informed.

Any finds covered by the provisions of the Treasure Act (1996, amended 2003, 2008) and Treasure (Designation) Order 2002[15], including gold and silver, will be secured and preserved in situ until a view can be obtained from the Portable Antiquity Scheme officer.

All identified finds and artefacts will be collected and retained. Certain classes of material, i.e. post-medieval pottery and building material may be discarded after recording if a representative sample is kept. No finds will be discarded without the prior approval of the Oxfordshire County Council's Archaeological Adviser.

Finds will be studied to provide a date range of the assemblage with particular reference to pottery. In addition, the artefacts will be used to characterise the Site, and to establish the potential for all categories of finds should further archaeological work be necessary.

All finds and samples will be treated in a proper manner and to standards agreed in advance with the Oxfordshire Museums Service. Finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the guidelines set out in United Kingdom Institute for Conservation's Conservation Guidelines No. 2.[16]

Provision for onsite conservation and finds treatment, in addition to any scientific dating of materials uncovered, will be undertaken where appropriate.

Oxfordshire County Council Archaeological Services (OCCAS) will monitor progress and standards throughout the project. The County Archaeological Officer shall be notified of the start date at least two weeks prior to commencement of work in order to arrange a date for the monitoring visit(s).

The SMS area should not be backfilled until after they have been monitored by OCCAS.

Upon completion of the project the landowner and the Oxfordshire Museums Service will be contacted.

8. Report Preparation

Upon completion of the SMS, the stratigraphic record and all excavated material from the Site will be reported on. Within one year of completion of the work on site, these results will be presented as a post-excavation assessment report.

[14] Campbell, G, Moffett, L and Straker, V (2011) *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (second edition).* Portsmouth: English Heritage
[15] MSO (1996, revised 2002, 2008) *Treasure Act 1996*.
[16] United Kingdom Institute for Conservation, 1983. *Conservation Guidelines No. 2.*

The report will include, as a minimum:

- A non-technical summary containing the essential elements of the results preceding the main body of the report.
- A table of contents.
- An introduction including a list of all staff members involved in the project.
- Summary geological, archaeological and historical background details for the Site.
- A statement of the aims of the project.
- A statement of the methodology of the excavation and an assessment of the same.
- A preliminary archaeological site narrative and account of the phasing based on the stratigraphic record and spot dating.
- Plans and sections at an appropriate scale cross-referenced with the written description.
- Appropriate maps, photographs and artefact drawings.
- A discussion of the location, extent, date, nature, condition, quality and significance of any archaeological deposits identified during the work.
- All finds and environmental specialist reports.
- An interpretation of the results of the excavation in relation to archaeology in the vicinity and an identification of any significance and research implications arising i.e. consideration of the archaeological evidence from within the site set in its broader landscape setting.
- A bibliography of sources consulted.
- Site matrix.
- Context register.

A list of specialist staff that may be used for assessment and analysis of samples and artefacts is given in Appendix B.

Richard Oram, Planning Archaeologist for Oxfordshire County Council, will be sent a copy of the draft report before a final version is produced or submitted to the local Planning Authority. Once finalised, copies of the report (paper & electronic) will also be submitted to be deposited in the relevant HER.

Any significant variation in the project design, including timetables, proposed after the agreement of the proposals must be acceptable to the Planning Archaeologist for Oxfordshire County Council.

An OASIS form will be completed, and a paper copy will be appended to the report. An electronic copy of the post-excavation assessment report will be deposited with the Archaeological Data Service (ADS).

9. Archive Preparation

The Site archive for the archaeological investigations will comprise all artefacts, environmental samples and written and drawn records. It is to be consolidated after completion of the whole project, with records and finds collated and ordered as a permanent record. Archaeological finds rarely have any monetary value, but they are an important source of information for future research, included in museum exhibits and teaching collections. The Chartered Institute of Archaeologists[17] and the Society of Museum Archaeologists[18] recommend that finds are

[17] Chartered Institute for Archaeologists (2014e). *Standards and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.*
[18] Society of Museum Archaeologists (1993). *Selection, Retention and Dispersal of Archaeological Collections*; Society of Museum Archaeologists (1995) *Towards an Accessible Archaeological Archive – The Transfer of Archaeological Archives to Museums: Guidelines for use in England, Northern Ireland, Scotland and Wales.*

publicly accessible and that landowners donate archaeological finds to a local museum. The receiving museum will be Oxfordshire Museums Service.

On completion of the project AOC will discuss arrangements for the archive to be deposited with the local museum and with the developer/landowner. This will be prepared in the format agreed with Oxfordshire Museum Services and following national guidance.[19]

In the event of the legal owner(s) resolving to retain all or part of the Site archive, they shall be responsible for the future preservation and maintenance of any material element of that archive. That part of the Site archive in question, shall be transferred to the legal owner only after; all necessary processing, research, analysis and investigative/stabilising conservation and correct packing necessary to prepare the archive for preservation and in a usable, accessible form, and to produce a full report for publication, has been completed. The owner shall ensure that all necessary provision is made for the long-term preservation of the archive in a satisfactory environment, and that it is accessible for future research. A proper record of material kept by the landowner shall be included in the written archive and public record. The explicit (written) permission of the owner shall be obtained in order that the Data Protection Act 1984 is not contravened.

In the case where finds are retained, landowner consent will be required to allow transfer of the finds to Oxfordshire Museum Service. A Deed of Transfer will be drawn up by the Oxford Museum Service for signing by the landowner. The complete finds inventory and further finds information can be provided to the landowner, on request.

The Site archive will be deposited with Oxfordshire Museum Services within one year of the completion of fieldwork (if no further work is required). It will then become publicly accessible.

10. Health and Safety

Health and Safety will take priority over all other requirements. A conditional aspect of all archaeological work is both safe access to the area of work and a safe working environment.

The project will be carried out in accordance with safe working practices and under the defined Health and Safety Policy. The construction (Design and Management) Regulations 2015 (CDM) may apply to the archaeological work depending on whether contractors other than the archaeological team are present on the Site.

A separate Risk Assessment/Method Statement (RAMS) will be prepared prior to the commencement of the fieldwork.

Staff present on site will be required to wear the appropriate Personal Protective Equipment (PPE), which will be issued as necessary. Welfare facilities will be provided by AOC Archaeology.

Where AOC is not the main contractor on a site the main contractor's Risk Assessment will have primacy over the AOC document given that:

- The main contractors' risk assessment is aware of, and takes account of, AOC's working practices – i.e. it does not compromise normal and safe archaeological procedure as set out in our Written Scheme of Investigation and Risk Assessment.

[19] Archaeology Data Service/ Digital Antiquity (2011). *Guides to Good Practice*. Archaeology Data Service, University of York; Brown D H (2011*). Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation. Second Edition*. Published by IfA on behalf of the Archaeological Archives Forum (AAF)

- AOC was notified of the full suite of hazards present prior to arriving on site.
- There is a proper induction and monitoring process in place and AOC staff have been through this process.
- There is no significant conflict between AOC H&S procedures and those proposed by the main contractor.
- AOC are made aware of new threats or hazards as they arise during the course of our on-site involvement.

11. General

The methodologies of the WSI will be met in full where reasonably practicable.

Any significant variations to the proposed methodology will be discussed and agreed with EWR Alliance and in advance of implementation.

The scope of fieldwork is aimed at meeting the aims of the project in a cost-effective manner. AOC Archaeology attempts to foresee all possible site-specific problems and make allowances for these. However, there may on occasion be unusual circumstances, which have not been included in the programme and costing. These can include:

- unavoidable delays due to extreme bad weather, vandalism etc.
- extensions to feature excavation sample sizes requested by the Oxfordshire County Council's Archaeological Advisor.
- complex structures or objects, including those in waterlogged conditions, requiring specialist removal.

12. Bibliography

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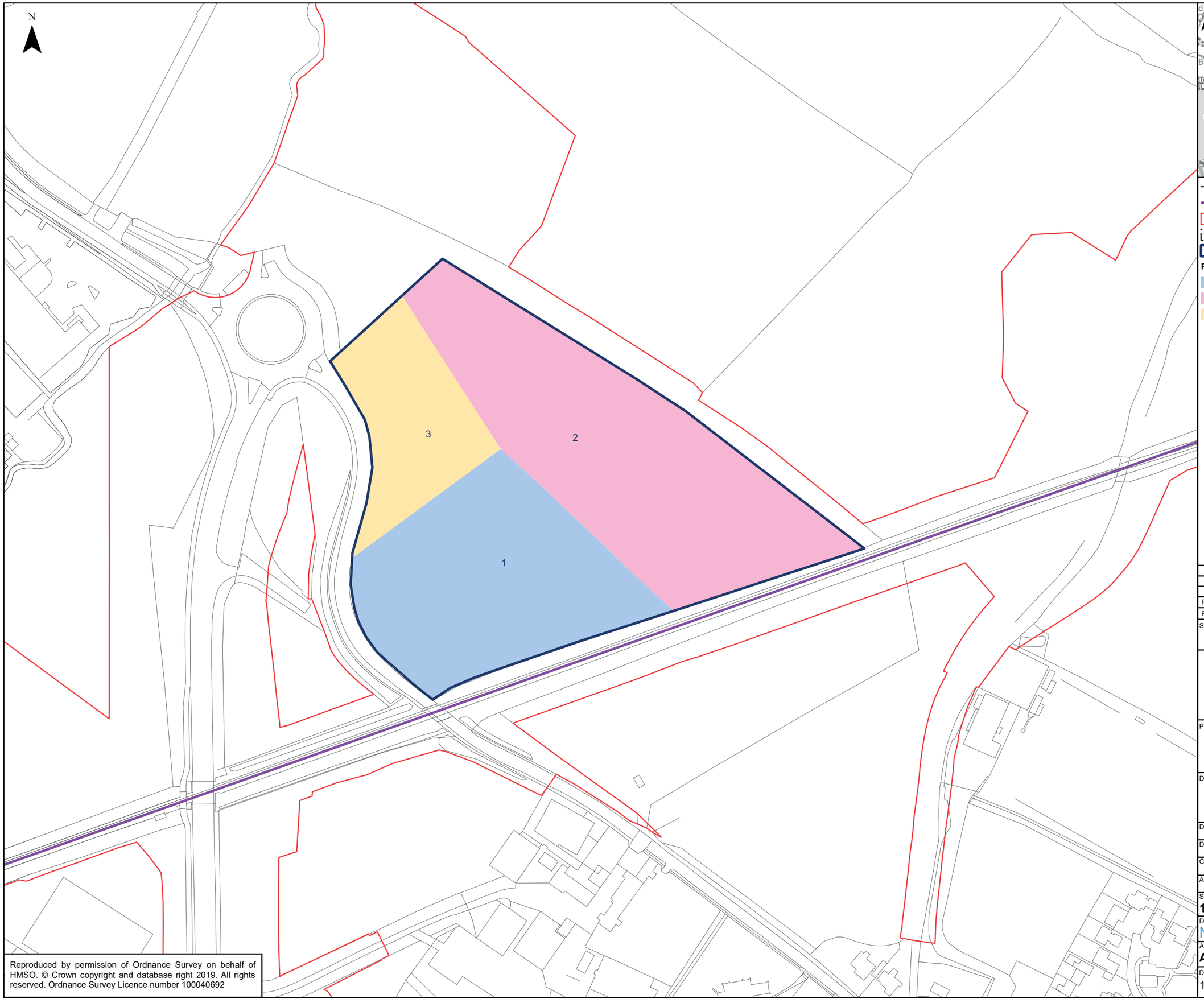
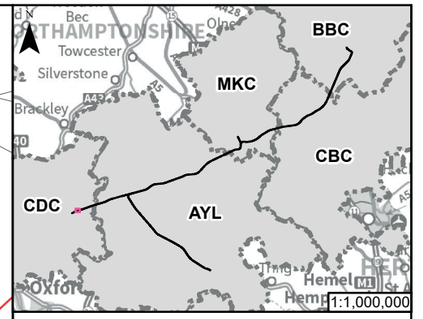
Appendices

Appendix A. **Site Location Plan**





PROJECT EXTENTS
DEVELOPMENT STAGE 2A1
SCHEME BOUNDARY
LOCAL AUTHORITY BOUNDARY
MITIGATION AREA

PHASE
1
2
3

0 100 Metres

Rev	Date	Description of Revisions	Dsnd	Chkd	Appr
P01	13/11/18	1ST ISSUE (TA) SCHEME BOUNDARY 04/06/2018	KS	RS	SR

Status: PUBLISHED - STAGE APPROVED
Suitability: A1

EWR Alliance
Connecting People

Project: THE NETWORK RAIL (EAST WEST RAIL BICESTER TO BEDFORD IMPROVEMENTS) ORDER

Drawing Title: FIGURE 1: SITE LOCATION

Designed	Andrej Celovsky	Signed	Date 18/09/2019
Drawn	Andrej Celovsky	Signed	Date 18/09/2019
Checked	-	Signed	Date 18/09/2019
Approved	-	Signed	Date 18/09/2019

Scale(s): **1:2,000**
ELR & Project Chainage: N/A
Design Package Risk Classification: NORMAL
Sheet: 1 of 1
Alternative Reference: **Alternative_Ref**
Revision: **P01**
Drawing Number: 133735_RW-EWR-XX-XX-DR-LH-010558

Sheet Size A3 297 x 420

Appendix B. General

A.1. Insurances

AOC holds Employers Liability Insurance, Public Liability Insurance and Professional Indemnity Insurance. Details can be supplied on request.

AOC will not be liable to indemnify the client against any compensation or damages for or with respect to:

- damage to crops being on the Area or Areas of Work (save in so far as possession has not been given to the Archaeological Contractor)
- the use or occupation of land (which has been provided by the Client) by the Project or for the purposes of completing the Project (including consequent loss of crops) or interference whether temporary or permanent with any right of way light air or other easement or quasi easement which are the unavoidable result of the Project in accordance with the Agreement
- any other damage which is the unavoidable result of the Project in accordance with the Agreement
- injuries or damage to persons or property resulting from any act or neglect or breach of statutory duty done or committed by the client or his agents servants or their contractors (not being employed by AOC Archaeology or for or in respect of any claims demands proceedings damages costs charges and expenses in respect thereof or in relation thereto

Where excavation has taken place trial pits will be backfilled with excavated material but will otherwise not be reinstated unless other arrangements have previously been agreed. Open area excavations normally will not be backfilled but left in a secure manner unless otherwise agreed.

A.2. Copyright and Confidentiality

AOC Archaeology will 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 will provide an exclusive license to the Client in all matters directly relating to the project as described in the Written Scheme of Investigation.

AOC will assign copyright to the client upon written request but retains the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988.

AOC will advise the Client of any such materials supplied in the course of projects, which are not AOC's copyright.

AOC undertake to respect all requirements for confidentiality about the Client's proposals provided that these are clearly stated. In addition, AOC further undertakes to keep confidential any conclusions about the likely implications of such proposals for the historic environment. It is expected that Clients respect AOC's and the Institute of Field Archaeologists' general ethical obligations not to suppress significant archaeological data for an unreasonable period

A.3. Standards

AOC conforms to the standards of professional conduct outlined in the Institute of Field Archaeologists' Code of Conduct, the IFA Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, the IFA Standards and Guidance for Desk Based Assessments, Field Evaluations etc., and the British Archaeologists and Developers Liaison Group Code of Practice.

Where practicable AOC will liaise with local archaeological bodies (both professional and amateur) in order that information about particular sites is disseminated both ways (subject to client confidentiality).

A.3.1. Specialist Staff

The following specialist staff may be used on this project depending on the type of artefacts and soil samples recovered during the course of the fieldwork. Further specialist staff may be required in some instances.

Environmental Assessment/analysis (seeds and charcoal)	Alys Vaughan-Williams	Freelance
Animal Bone	Matilda Holmes	Freelance
Roman Ceramic Building Material (CBM)	Andrew Peachey	Arch. Solutions
Post-Medieval CBM	Les Capon	AOC
Clay Tobacco Pipes	Kylie McDermott	AOC
Soils and sediments analysis	Rob Batchelor	QUEST
Finds Illustrations	Les Capon	AOC
Roman Glass	Angela Wandle	Freelance
Flint	Rob Engl	AOC
Prehistoric-Post Medieval Pottery	Lorraine Mepham	Wessex Archaeology
Post-Medieval Pottery	Kylie McDermott	AOC
Human Skeletal Remains	Mara Tesorieri	AOC
Conservation	Gretel Evans	AOC
Post-Medieval Coins, Metal and Glass	Andrew Morrison	AOC
Roman/Medieval Coins	Andrej Celovsky	AOC
Iron Age/Roman Metal	Helen Chittock	AOC
Industrial	Dawn McLaren	AOC
Wood	Anne Crone	AOC
Pollen assessment/analysis	Paula Milburn	AOC
Molluscs	Greg Campbell	Freelance
Geoarchaeology	Rob Batchelor	QUEST
Paleoentomology	Enid Allison	Canterbury Archaeological Trust

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