

1. Summary

Development Stage 2A2: 2A0162/8.1/FB Work Access and Construction Site at Land East of Station Road, Oxfordshire

Site Details

Development Stage	2A2
Site Name	2A0162/8.1/FB
Type of Works	Work Access and Construction Site
Proposed Archaeological Works	Watching Brief
National Grid Reference	SP 62050 23690
Site Area	1.3 ha (13,004 m ²)
Chainage	106800 to 107050
Land Use	Pasture
Local Planning Authority	Cherwell District Council
Curator	Oxfordshire County Council; Richard Oram, Planning Archaeologist (archaeologydc@oxfordshire.gov.uk or 07917 001026)

Proposed Archaeological Investigation

Archaeological monitoring will involve the observation, investigation and recording of the work access and construction site. It is important to stress the main contractor's method of working will not be directly controlled for archaeological purposes, unless important archaeological discoveries are found (in which case the site method may change to Construction Integrated Recording¹). All work will be carried out by the Contractor in accordance with national, regional and local policy and guidelines, and in conjunction with the Heritage Delivery Strategy².

Previous Archaeological Works

Type of Work Undertaken	Findings
None	None

¹ EWR Alliance, 2019a. *Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy*. Unpublished Report. Section 6.6

² *ibid*



Archaeological Potential

Potential	Period	Type of remains likely to be encountered
High	Medieval	Remains of an agricultural nature e.g. ridge & furrow; field system; finds associated with manuring
	Post-medieval	Remains of an agricultural nature
Medium	Iron Age	Settlement; artefacts
	Romano-British	Field systems; settlement
Low	Palaeolithic	Flint scatters
	Mesolithic	Flint scatters
	Neolithic	Lithic scatters; settlement
	Bronze Age	Settlement; ceremonial
	Early Medieval	Field systems; settlement
	Modern	Agricultural remains



2. Introduction

This Written Scheme of Investigation (WSI) sets out a methodology for an archaeological watching brief during the completion of works at the construction site 2A0162/8.1/FB, Land East of Station Road ('the Site'). The Site is highlighted within the 'Specific Sites requiring Written Schemes of Investigation' section of the Heritage Delivery Strategy as requiring a WSI for these archaeological works³.

The Site is located within Development Stage 2A2 of the EWR2 scheme (centred on NGR Ref: SP 62050 23690; Figure 1). The Site comprises a triangular parcel of land of approximately 1.3 ha located to the north-east of Launton, c.2km from the centre of the hamlet. The Site is currently in use for pasture and is contained within two fields with associated hedgerows and tree lines. The Site lies within the local authority administrative area of Cherwell District Council.

Topographically, the Site is situated on gently sloping ground, situated at approximately 70m aOD (above Ordnance Datum). The underlying bedrock of the Site is Peterborough Member - Mudstone, a sedimentary bedrock formed in the Jurassic period, between 166.1 and 163.5 million years ago⁴. A band of alluvium overlies the bedrock along the north-western boundary of the Site.

The Site is required for a construction area associated with the removal of the level crossing and its replacement with an overbridge. The Site will be completely stripped of topsoil and will require deeper excavations across the majority of the area. The existing pond located in the south west corner will be infilled. The extent of the intrusive works thus means that archaeological mitigation within the Site is required.

3. Key Potential

Prehistoric (500,000BC – AD43)

There is an absence of evidence for Palaeolithic in the vicinity of the Site. This is thought to be due to alluvial deposits masking early prehistoric remains in this area⁵; a band of which is record along the southern extent of the Site. However, there is presently little identified evidence for Lower Palaeolithic remains on the gravel terraces of the River Cherwell in the area around Bicester⁶. There is also no evidence for Mesolithic activity in the vicinity of the Site, although lithic scatters have been found during archaeological investigations near Bicester. As such there is low potential for remains of these dates to be present on the Site.

No evidence for Neolithic activity is recorded close to the Site, with Neolithic activity within Oxfordshire primarily based within the Thame valley close to the river's confluence with the River Thames approximately 17km south-west of the Site⁷. However, activity has been found further afield and the absence of known Neolithic sites may be a result of limited archaeological investigation rather than limited activity during this period. The potential for Neolithic remains to be encountered is judged to be unknown.

Despite a wealth of Bronze Age activity in the county of Oxfordshire, there is no evidence of Bronze Age activity in proximity to the Site. There is an observable bias in Bronze Age occupation towards Milton Keynes and Aylesbury and as a result, Bronze Age remains within the region appear to be primarily focused within the Ouzel river valley, c. 25 km to the east between Blechley and Leighton

³EWR Alliance, 2019. *Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy*. Unpublished Report Section 8, Table 8.1 Page 8-8

⁴ British Geological Survey Website, 2019.

⁵ Hardaker, T. (2014) The Lower and Middle Palaeolithic of Oxfordshire. In Hey, G and J, Hinds (eds) *Solent-Thames Research Framework*; Hey, G. 2014. Late Upper Palaeolithic and Mesolithic: Resource Assessment. In G. Hey, and J. Hind, (eds) *Solent-Thames Research Framework*

⁶ EWR Alliance, 2018. *Network Rail Order Environmental Statement. Volume 2ii - Route Section 2A*. Chapter 7, Cultural Heritage.

⁷ Ibid

Buzzard. Oxfordshire had been subject to extensive woodland clearance carried out in the Middle/Late Iron Age, with environmental data corroborating the rise in open grassland environments⁸. Iron Age enclosed settlement and land management is observable in the wider landscape, with Late Iron Age remains encountered 2km south-west of the Site during trial trenching at Compound 2A1⁹ associated with an Iron Age/Romano-British settlement (MOX12267) previously excavated in 2002. There is deemed to be medium potential for Bronze Age and Iron Age remains within the Site based on current evidence.

Romano-British (AD43 – AD410)

The Romano-British period saw widespread activity across the EWR route and the wider landscape¹⁰. Dispersed rural settlement has been encountered beyond the limits of the major Romano-British centres such as Alchester in the region of Oxfordshire and along the 2A EWR route. Remains to the west of the Site were found in 2002 during an excavation at Bicester Perimeter Road, c.2.5km from the Site (MOX12667; SMR Ref: 16540). A ditch and posthole were recorded which contained bone and Iron Age and Romano-British pottery. Further Late Iron Age to Romano-British evidence was then encountered in 2004, c. 3km south-west of the Site (MOX23494; SMR Ref: 26122). A farmstead and field system dated to the 2nd and 3rd centuries AD was excavated with trackways and field ditches as well as two wells. During trial trenching at Compound 2A1, remains of Late Iron Age and Romano-British settlement and land management was encountered in 2019 which appears to be the northern periphery of the settlement. There is deemed to be a medium potential for remains to be present within the Site.

Early Medieval (AD410 – AD1066)

There is no current archaeological evidence recorded within the Site or surrounding area which dates to the Early Medieval period; much of the activity at that time centred around Marsh Gibbon, c. 2km south-east of the Site, and Bicester, c. 3km to the south-west¹¹. There is deemed to be low potential for Early Medieval remains.

Late Medieval (AD1066 – AD1540)

The manorial estates of Marsh [Gibbon] and Launton are recorded in the Domesday Book (1086) within the Hundred of Mow. Based on the Site's current position; approximately 1.5km north-east of the limits of Launton and c. 2km north-west of Marsh Gibbon, it is likely that it lay beyond the limits of settlement within the associated ploughlands. This is further evidenced by the presence of ridge and furrow, visible on LiDAR imagery and ridge and furrow visible on aerial photographs in the surrounding area. There is high potential for such remains to be present although these are not visible within the Site itself.

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

Early mapping depicts the settlements of 'Mershe Gibbon', 'Bicester' and 'Launton' in the vicinity of the Site although minimal detail of the settlements or surrounding land is given¹². In the late 18th century, more detailed mapping of the Site shows Station Road to the west of the Site, aligned south-west to north-east between Launton and Poundon¹³. A singular rectangular structure is depicted at the south-western extent of the Site on Ordnance Survey mapping from 1881 onwards; however, the structure no

⁸ Lambrick, G. (2014) The Later Bronze Age and Iron Age: Resource assessment. In G. Hey, and J. Hind, (eds) *Solent-Thames Research Framework*

⁹ EWR Alliance, 2019b. Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: An Archaeological Evaluation Report. Unpublished report.

¹⁰ EWR Alliance, 2018. Network Rail *Order Environmental Statement. Volume 2ii - Route Section 2A*. Chapter 7, Cultural Heritage.

¹¹ *ibid*

¹² Saxton, 1574. *Oxonii, buckinghamiae et berceriae Comitatum*.

¹³ Cary, J., 1794. *Cary's England, Wales and Scotland (Sheets 23-24)*.

longer stands. Ordnance Survey mapping from the 19th century illustrates the Site within a landscape of enclosed fields with the Site shown as either pasture or arable land¹⁴.

The line of the existing railway, established in the mid-19th century, runs to the immediate south of the Site. The site of Launton Station (MOX5012; SMR Ref: 5870) is recorded located 80 m to the south-west of the Site on the railway line. There is deemed to be high potential for post-medieval remains, likely features associated with the construction and use of the railway and evidence of continued agricultural use.

Modern Period (Post-1901)

There has been minimal change to the Site throughout the 20th and 21st centuries, as exemplified by cartographic evidence¹⁵ and aerial imagery. The Site has continued to occupy enclosed fields throughout the modern period with part of a rectangular structure located at the south-western corner of the Site.

Historic Landscape Character

The present character of the Site can be defined as 18th to 19th century parliamentary type enclosures with a late nineteenth century railway to the north.

4. Previous Works

No previous works have been undertaken within the Site. LiDAR data was not available for the Site.

5. Proposal for Archaeological Investigations

The proposed programme of works at 2A0162/8.1/FB will initially involve a programme of archaeological monitoring. All works will follow the specific methodologies set out in Section 6 of the Heritage Delivery Strategy¹⁶:

- 6.5 Archaeological Monitoring
- 6.6 Construction Integrated Recording
- 6.7 Chance Finds Procedure
- 6.9 Environmental Sampling
- 6.10 Human Remains
- 6.11 Finds
- 6.12 Recording & Reporting
- 6.13 Archiving

Where archaeological remains are encountered, further mitigation may be required. This will be discussed and agreed between the Contractor, the Employer and the Curator.

¹⁴ Ordnance Survey, 1815. *Bicester*; OS, 1881. *Oxfordshire XXIII.3*. 25 inch to the mile; OS, 1885. *Oxfordshire XXIII*. Six inch to the mile; OS,

¹⁵ OS, 1900. *Buckinghamshire XXI.NE*. Six inch; 25 inch. OS, 1922. *Oxfordshire XXIII.3*. 25 inch to the mile. OS, 1923. *Buckinghamshire XXI.NE*. Six inch; OS, 1952. *Buckinghamshire XXI.NE*. Six inch; OS, 1968. *OS Plan*, 1: 2,500.

¹⁶ EWR Alliance, 2019a. *Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy*. Unpublished Report

6. Archaeological Watching Brief Methodology

The archaeologist will be present to observe all intrusive groundworks associated with the site investigations. Should there be unsupported sections deemed unsafe by the onsite staff, no member of staff will enter the excavated area. In this instance recording of the excavated areas will be conducted from ground level unless shoring has been made available.

In the event that significant archaeological remains are revealed, additional excavation staff are available. The ground work in the location of the archaeology can be temporarily halted in order to determine the extent and character of any remains revealed. The degree of further work will be defined in discussions with the monitoring archaeologist and client. Delays to development can be minimised by continuing to monitor areas of watching brief while the archaeological resource is recorded.

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

- Hand cleaning of archaeological sections and surfaces sufficient to establish the stratigraphic sequence exposed.
- Structures will be cleaned to enable interpretation, recording and phasing.
- Planning of all exposed archaeological features and horizons (including boundaries of natural) at an appropriate scale.
- 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 EWR Alliance Archaeological Manager 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.

Records will be produced using either pro-forma context or trench record sheets compatible with those published by the Museum of London¹⁷, 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 evaluation will be made. Plans and sections of features will be drawn at an appropriate scale of 1:10 or 1:20, as appropriate. The actual areas of ground disturbance and any features of archaeological interest will be accurately located on a site plan and to a known, permanent location. Locations of observations may be surveyed using a differential GPS (Trimble).

Bulk samples, 20 L for wet and 40 L 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 guidelines¹⁸.

¹⁷ Museum of London (1994). *Archaeological Site Manual* (Third Edition).

¹⁸ Campbell, Moffett and Straker (2011). *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation* (Second Edition).

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 2002¹⁹, 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. 2²⁰.

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).

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

7. Site in the Context of the Research Agenda

The Heritage Delivery Strategy outline the Specific Research Objectives (SROs) that the work on EWR2 may address²¹.

Given the location of the Site within an area of known medieval to post-medieval ridge and furrow, there is considered a high potential for medieval and post-medieval remains, particularly agricultural remains, to survive within the Site. If medieval or post-medieval features or medieval and later ridge and furrow are encountered within the Site, they may have the potential to contribute to:

- **SRO29:** Understand the chronology of development and character of later medieval field systems and their relationship to settlement across the region
- **SRO30:** Better understand the character and organisation of later medieval ridge and furrow and field systems

¹⁹ MSO (1996, revised 2002, 2008) *Treasure Act 1996*.

²⁰ United Kingdom Institute for Conservation, 1983. *Conservation Guidelines No. 2*.

²¹ EWR Alliance, 2019a. *Network Rail (East West Rail Bicester to Bedford Improvements) Order Heritage Delivery Strategy*. Unpublished Report Section 4.4

If features associated with the railway line adjacent to the southern boundary of the Site are encountered, they may have the potential to contribute to:

- **SRO45:** Investigate the link between the development of the railways and broader changes in the historic landscape during the post-mediaeval period, such as urban settlement expansion and the decline of the canal network

The potential for encountering hitherto unknown remains of other periods is low but cannot be ruled out.

The ability of any other remains which might be encountered to contribute to the established regional and sub-regional research framework²² and the SRO's would be dependent upon the nature, condition, extent and significance of the remains. Any such remains, however, could have the potential to contribute to and/or further the understanding of the patterns of land use, settlement and/or economy of the period to which they belong. Should hitherto unknown remains be encountered during archaeological monitoring, they should be considered in the context of Section 4 of Heritage Delivery Strategy and Solent-Thames Framework, or any successor document.

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.

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.

²² Hey, G. and Hind, J., 2014. Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas. Oxford Wessex Monograph Series

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.

9. Archiving

On completion of the project, an electronic copy of the post-excavation assessment report will be deposited with the Archaeological Data Service (ADS) as per Section 6.13 of the Heritage Delivery Strategy²³.

On completion of the EWR project the archive will be deposited with Buckinghamshire County Museum. An accession number will be applied for from Buckinghamshire County Museum. The archive will be prepared in the format agreed with the Museum and following national guidance²⁴²⁵.

10. Bibliography

Archaeology Data Service/ Digital Antiquity (2011). *Guides to Good Practice*. Archaeology Data Service, University of York

British Geological Survey Website, 2019. *Geology of Britain Viewer*. URL: www.bgs.ac.uk/geologyofbritain. Date accessed: December 2019.

Brown D H, 2011. *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*. Second Edition.

Domesday Book Online, 2019 URL: <https://opendomesday.org/>. Date accessed: December 2019

EWR Alliance, 2018. *Network Rail Order Environmental Statement. Volume 2ii - Route Section 2A*. Chapter 7, Cultural Heritage.

EWR Alliance, 2019a. *Network Rail (East West Rail Bicester to Bedford Improvements) Order: Heritage Delivery Strategy*. Unpublished report

EWR Alliance, 2019b. *Compound A1: Land East of Bicester Road, Bicester, Oxfordshire: An Archaeological Evaluation Report*. Unpublished report.

Hardaker, T. (2014) *The Lower and Middle Palaeolithic of Oxfordshire*. In Hey, G and J, Hinds (eds) *Solent-Thames Research Framework*; Hey, G. 2014. *Late Upper Palaeolithic and Mesolithic: Resource Assessment*. In G. Hey, and J. Hind, (eds) *Solent-Thames Research Framework*

Hey, G. and Hind, J., 2014. *Solent-Thames Research Framework for the Historic Environment Resource Assessments and Research Agendas*. Oxford Wessex Monograph Series

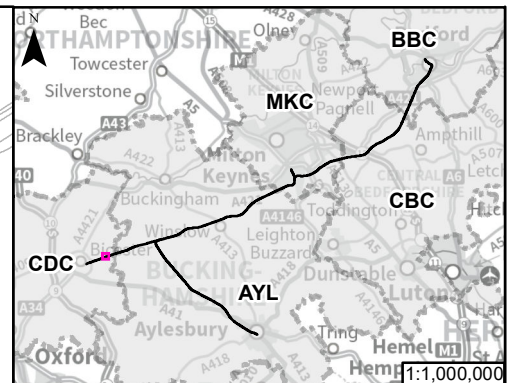
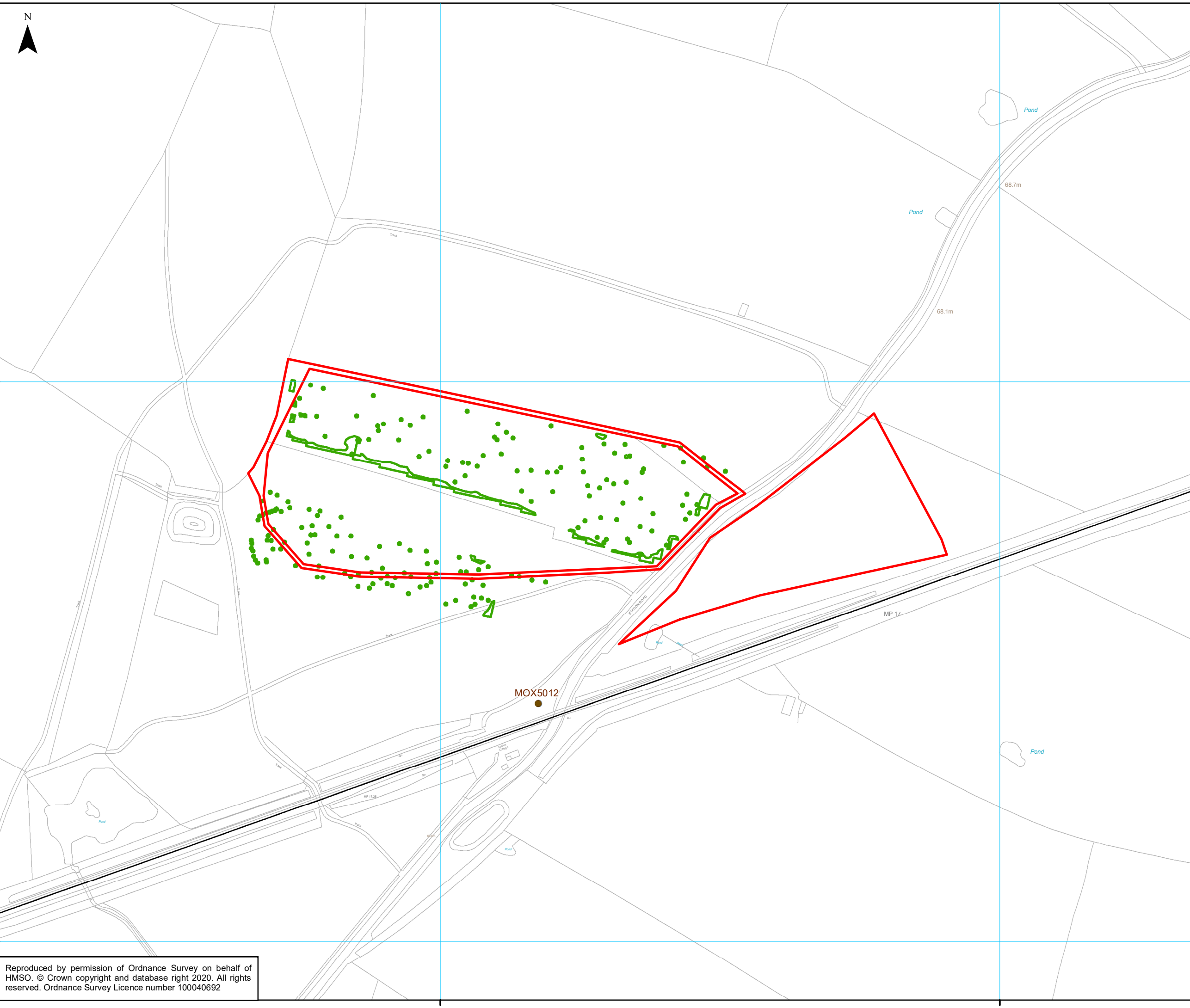
²³ EWR Alliance, 2019a. *Network Rail (East West Rail Bicester to Bedford Improvements) Order: Heritage Delivery Strategy*. Unpublished Report

²⁴ Archaeology Data Service/ Digital Antiquity (2011). *Guides to Good Practice*. Archaeology Data Service, University of York

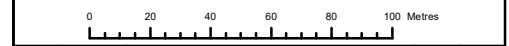
²⁵ Brown D H, 2011. *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*. Second Edition.

Lambrick, G. (2014) The Later Bronze Age and Iron Age: Resource assessment. In G. Hey, and J. Hind, (eds) *Solent-Thames Research Framework*





- PROJECT EXTENTS
- LOCAL AUTHORITY BOUNDARY
- SITE
- MONUMENT
- GEOPHYSICAL INTERPRETATION BORDER



P01	23/05/20	FIRST ISSUE	KP	KS	AFM
Rev	Date	Description of Revisions	Dsmd	Chkd	Appr
Status	PUBLISHED - STAGE APPROVED				Suitability A1



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

Drawing Title
FIGURE 2A0359/8.1/FB,2A0162/8.1/FB - WORK ACCESS AND CONSTRUCTION

Designed	Krithika S Patwardhan	Signed		Date	24/05/2020
Drawn	Krithika S Patwardhan	Signed		Date	24/05/2020
Checked	Kelvin Snell	Signed		Date	24/05/2020
Approved	Amy Farrington McCabe	Signed		Date	24/05/2020

Scale(s)
1:2,500 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-010744

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Sheet Size A3 297 x 420