



# Minerva Archaeology Ltd

Historic Environment Services

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## WRITTEN SCHEME OF INVESTIGATION



**CHURCH HALL FARM  
CHURCH END, BROXTED  
ESSEX**

**ARCHAEOLOGICAL EVALUATION**

**Ref: MA 459  
Planning ref: UTT/22/3106/FUL**

**VERSION 1.0**

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# MINERVA ARCHAEOLOGY LTD.

*Historic Environment Services*

Managing Director: Mark Sycamore, BA ACIfA

## CHURCH HALL FARM Church End, Broxted, Essex

Project ref.: MA 459  
Planning ref: UTT/22/3106/FUL  
Museum ref: TBC  
OASIS ref: minervaa2- 519460

### Archaeological Written Scheme of Investigation for Evaluation

*Prepared on behalf of Mr Tony Wildman*

*by*

Chris Turner, BSC (HONS), MCIFA

September 2023

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## Introduction

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**1.1** This Written Scheme of Investigation (WSI) has been prepared at the request of *Mr T. Wildman*, to cover a programme of archaeological work to be carried out as a process of investigation and mitigation as a condition of planning consent for the development at Church Hall Farm, Church End, Broxted, Essex.

**1.2** The present site lies to the north eastern edge of the settlement of Broxted, 100m east of St Mary the Virgin Church, within the area of a former medieval farm complex, centred at NGR TL 57965 27365. The site is situated to the south of the access road, with residential housing to the west and south. Immediately to the north of the site lies the 15<sup>th</sup> century grade II\* listed barn and a pond (Listing: 1112225) (Figure 1).

**1.3** The present development proposes the construction of a single detached dwelling and detached two bay cartshed, with associated landscaping.

### Planning

**1.4** Planning permission for the development (ref. UTT/22/3106/FUL) has been granted by Uttlesford District Council (UDC) subject to a historic environment condition in line with Paragraph 189 of the *National Planning Policy Framework* (NPPF 2021). Condition 3 states:

**3)**

*1. No development or preliminary groundworks of any kind shall take place until a programme of archaeological investigation has been secured in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.*

*2. No development or preliminary groundworks of any kind shall take place until the completion of the programme of archaeological investigation identified in the WSI defined in 1 above.*

*3. The applicant will submit to the local planning authority a post excavation assessment (to be submitted within six months of the completion of the fieldwork, unless otherwise agreed in advance with the Planning Authority). This will result in the completion of post excavation analysis, preparation of a full site archive and report ready for deposition at the local museum, and submission of a publication report.*

**Reason:** *The Historic Environment Record indicate that the proposed development lies within a potentially sensitive area of heritage assets in accordance with ULP Policy ENV4 of the Uttlesford Local Plan 2005 (Adopted) and the NPPF 2021.*

**1.5** The brief, prepared by the Historic Environment Advisor (HEA) of Essex County Council, indicates that a programme of Trial Trenching and Excavation at the site is required (Lee-Smith, 2023).

### **Proposed Scheme**

**1.6** It is considered that the best strategy to characterise the archaeological potential of the site, and assess the survival of any archaeological deposits, will be by the excavation of trial trenching in the area affected by the new development. The strategy is intended to establish the nature of the stratigraphic sequence while minimising unnecessary destruction of the archaeological resource.

**1.7** The evaluation will consist of the excavation of a cross-shaped trial trench, spanning the width and length of the proposed new dwelling. The cross will be formed of three trenches each measuring 2m wide, Trench 1 measures 14m in length, trench 2 is 5m and trench 3 measures 4m long (Figure 2). All trenches will be excavated under close supervision by machine fitted with a toothless bucket.

**1.8** The present scheme will form an incremental process that may involve more stages of field investigation, together with analysis and report preparation, leading to the publication of the findings and the deposition of the project archive with an approved repository. The present document represents the archaeological *Written Scheme of Investigation (WSI)* required by local planning authority and includes a research design, an outline of the investigative process that is to be followed, and a method statement for the first stage of investigation. Further method statements may be prepared for subsequent stages of work.

### **Monitoring**

**1.9** The Historic Environment Advisors (HEA) of Essex County Council, as the lead curatorial authority for the area, will be kept informed of the progress of fieldwork to enable the timetabling of monitoring visits at appropriate intervals.

## Research Design

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### Study Area

**2.1** In order to establish the archaeological and historical context for the site, the overview set out below has been drawn under licence from the Essex *Historic Environment Record* (HER), Minerva Archaeology's own records and other sources. The study area extends to a 500m radius around the centre of the site.

### Topography

**2.2** The site lies on relatively high ground at around 100m AOD. To the north and south of Broxted, streams run east towards the River Chelmer, situated approximately 2km to the east.

### Geology

**2.3** Locally the geology consist of 'boulder clay of the Lowestoft Formation. These superficial deposits formed between 480 and 423 thousand years ago during the Quaternary period.

**2.4** The underlying bedrock consists of the Clay, silt and sand of the London formation. Formed between 56 and 47.8 million years ago, during the Palaeogene period. (British Geological Survey).

### Previous Stages of work

**2.5** There has been no previous stages of archaeological work carried out on the present site.

### Archaeological Areas (Alert, Areas of significance etc)

**2.6** The proposed development does lie within a designated Area of Archaeological Significance.

### Conservation Areas

**2.7** The site does not lie within a conservation area.

### Scheduled Monuments

**2.8** There are no Schedule Monuments within the study radius. The nearest, the remains of St Mary's Cistercian Abbey at Tilty (SM: 1002164) lies 2km to the east.

### Listed Buildings

**2.9** There are 6 listed structures within the study area, the majority are post medieval and reflect the rural nature of the area. 100m to the west lies the grade II\* listed Church of St Mary the Virgin (listing: 112251). The church has its origins in the 13<sup>th</sup> century, altered during the 14<sup>th</sup> and 15<sup>th</sup> centuries and later restored in the late 19<sup>th</sup> century.

**2.10** 60m to the west lies the grade II\* Church Hall with associated later brew house (listing 1322561). The hall predominately dates from the 16<sup>th</sup> century, but may have 15<sup>th</sup> century origins.

**2.11** On the other side of the access track, approximately 25m to the north, lies a grade II\* medieval barn (listing 1112225) adjacent to a large pond. The description is:

*Early C15 aisled barn, timber framed and weatherboarded with red plain tile half hipped roof. Nine bays long with arch bracing to tie beams, crown post roof, with*

*down bracing to tie beams, alternate sides only. Jowled main posts, braced to tie beam. Scarfs are face halved and tabled, laterally keyed, with 2 face pegs and one bladed abuttment. Two midstreys on west side.*

### **Ancient Woodland**

**2.12** No ancient woodlands are located within a 500m radius of the present site. However in the wider area there is Hawland Wood 1.3km to the north west, and Esely Wood 1.6km to the east.

### **Historic Parks and Gardens**

**2.13** In the 1930s the ornamental gardens of Hill Pasture and Ashgrove House were created, 150m to the north east of the site (HER 46708).

### **Registered Battlefields**

**2.14** No Registered Battlefields are located within or in the immediate vicinity of the study area.

## **Significant Heritage Assets and Historic Narrative**

### **Prehistoric**

- There is very little evidence of prehistoric activity within the study area. The earliest evidence or activity comes from a Portable Antiquities Scheme findspot of Middle Bronze Age date (HER 51016). Unfortunately, the location is only given as broadly from the Broxted Area. There are undated cropmarks of a trackway and possible enclosure, which may have prehistoric origins, 330m to the east at Ashgrove House (HER 17158).
- Some Roman bricks and tile have been identified within the church walls, 100m to the west. This may indicate Roman activity within the vicinity (HER 4616).

### **Medieval**

- The settlement is mentioned as “*Broccshesheuot*” in 1086 Domesday Survey, and consisted of 34 households. Indicating the settlement was well established by the 11<sup>th</sup> century.
- The medieval church of St Mary the Virgin (HER 4617) 100m to the west of the site, coupled with the 15<sup>th</sup> and 16<sup>th</sup> century Church Farm buildings (HER 39286 & 37405), in the immediate vicinity demonstrates medieval activity in close proximity to the site.
- The area of a possible shrunken medieval settlement associated with Chickney, lies 480m to the north west (HER 4622). Within the same area lies Chickney Hall and its associated barn, granary and out buildings. The original hall which dated from the 15<sup>th</sup> century appears to have been replaced in the early 20<sup>th</sup> century, the later 17<sup>th</sup> century structures survive (HER 4623). Nearby lies a medieval aisled barn, dating from the mid 14<sup>th</sup> century (HER 4624).

### **Post Medieval and Modern**

- Church Hall farm continued to develop into this period with additions to the hall and the construction of other farm outbuildings during the 17<sup>th</sup> and 18<sup>th</sup> centuries (HER 34707).

- The site of a post medieval post windmill (HER 4649) lies 350m to the south.
- Cartographic evidence from the late 19<sup>th</sup> century and start of the 20<sup>th</sup> century demonstrates a former farm building and, an adjacent small pond, on the present site, located to the south of the access road (Figure 3). This former agricultural building and the small pond appear to lie within the footprint of the proposed new dwelling. By the 1970s both of these features are absent from mapping.
- Adjacent to the western boundary of the site is the site of the former Whitehall hotel, which was converted to residential dwellings in 2016. A building record of the hotel structure and associated buildings was undertaken (EEX 59030), and the earliest elements identified dated from the 15 and 16<sup>th</sup> centuries (Hillman-Crouch, 2016).
- A broader desk based assessment was also carried out for the hotel development site (Brooks, 2016). This concluded the hotel site may:  
*“be the site of an earlier settlement, predating the existing 15th-17th-century buildings and 13th-century church. This fact, as well as the presence of Roman brick in St Mary’s Church, means the [development site] has the potential for previously-undiscovered remains of Roman, Anglo-Saxon and/or medieval date.”*
- There are number of World War II assets within the study area, including the location of a spigot mortar (HER 10443) and former anti-tank blocks (HER 10442) at Broadwater bridge 350m to the north of the site. Just to the east of the bridge is a pillbox ((Type FW3/24) (HER 10444) and the former site of another similar pillbox lies 500m to the east at Coldarbour Farm (HER 10445).

## Aims and Objectives

**2.15** The aims of the present investigation shall be:

- to establish the location, depth, extent, date, character and condition of any remains that are liable to be threatened by the development;
- to consider the local and regional archaeological and historical context of such remains, and their significance and quality, in relation to current published regional research; and,
- to ensure that an appropriate strategy for the mitigation of damage or destruction of any such remains is adopted.

**2.16** Considering the advice and the site and study area background, it is possible that this investigation has the potential to contribute to an understanding of the origins and development of Broxton, in particular:

- The origin of the settlement of Broxton;
- The layout and extent of the medieval farm complex at church end.



In particular, the East of England Regional Research Framework highlights several areas of further study that may be considered as specific objectives for the present investigation:

- Med (Rural) 03: How can we improve our understanding of medieval agricultural practices?
- Med (Rural) 09: How can we characterise medieval rural settlement morphology and relationships?
- Med (Rural) 12: Can we explain the origin and development of medieval rural church-and-hall complexes?
- Med (Rural) 14: How can we characterise and explain medieval rural settlement change, evolution and abandonment?

## Company Structure

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### *Introduction*

**3.1** Minerva Archaeology is an independent practice specialising in archaeology and the historic environment. The company undertakes a wide variety of commercial archaeological projects for clients involved in housing and industrial development, pipeline and road construction, agriculture and landscaping.

### *Project Management*

**3.2** The Project will be administered and co-ordinated by Mark Sycamore BA ACIFA, Minerva Archaeology's *Managing Director*. He holds an honours degree in archaeology from the University of Lampeter and has over fifteen years' experience of the management of archaeological projects, and of fieldwork in both urban and rural contexts.

**3.3** Fieldwork will be managed by Chris Turner BSc MCIFA, the Minerva Archaeology's *Operations Manager*. Chris holds an honours degree in Archaeological Science from the University of Bradford, and has over twenty years of practical archaeological experience in the commercial sector. Chris is a Member of the Chartered Institute for Archaeologists.

### *Staffing*

**3.4** Minerva Archaeology employs technical and specialist staff with a broad range of complementary experience covering all aspects of research, recording and analysis of archaeological and historical structures, features, and deposits, together with the artefacts and ecofacts associated with them.

**3.5** Field staff on the project will normally be expected to have the following qualifications:

- a) All Project Officers will have had at least four years' experience in the field, with at least one of those at supervisory grade. They will also be corporate members of the Chartered Institute for Archaeologists.
- (b) All Assistant Project Officers will have had at least three years' experience in the field. They will also be corporate members of the Chartered Institute for Archaeologists.
- (c) All other members of the team will have had a minimum of two years' experience in the field. Corporate or affiliate membership of the Chartered Institute for Archaeologists will be considered desirable.

## Specialist Support

**3.6** While members of the project team have the necessary local, academic and professional knowledge to examine a broad range of artefacts and ecofacts, and to undertake the majority of tasks required in archaeological practice, provision will be made for academic advice and technical services to be sought from appropriate recognised specialists if required. The current list of relevant specialists is given below:

Historic buildings	David Hillelson, Heritage Network
Ceramics: Prehistoric	Andy Fawcett, Bury St Edmunds
Ceramics: LPRIA/Romano-British	Helen Ashworth, Heritage Network
Ceramics: Medieval/post-medieval	Paul Blinkhorn, Northampton
Ceramics: Saxon	<i>Ditto</i>
Church Archaeology	David Hillelson, Heritage Network
Conservation	Julia Park-Newman, Conservation Services
Decorative metalwork: IA/Roman	Angela Wardle, Stevenage
Dendrochronology	Dr K. Lucus, Reading University
Environmental analysis	Andy Peachey, Wardell Armstrong
Faunal remains	<i>Ditto</i>
Flints	Keith Fitzpatrick-Matthews, N Herts Museums
Geophysical surveying	SUMO Services, Worcestershire
Human remains	Malin Holst, York Osteoarchaeology
Industrial residue analysis	Jane Cowgill, Lincolnshire
Numismatics	M. Curteis, BA AMA, Chelmsford Museum
Palynology	Rob Scaife, Palaeopol
Petrology	D. Williams, Southampton University
Radio carbon dating	SUERC, Glasgow

## Standards

**3.7** Minerva Archaeology's general operational procedures for archaeology are documented in a series of manuals which are available for consultation on site and in our offices.

**3.8** Minerva Archaeology currently undergoing the process to become a registered organisation with the *Chartered Institute for Archaeologists* (CIfA). The company aims to maintain high standards of work and undertakes to follow the Code of Conduct of the CIfA, the Standards for Field Archaeology in the East of England published by the Association of Local Government Officers (ALGAO), and the relevant sections of the professional standards and guidelines set by the CIfA, the Historic Buildings and Monuments Commission for England (Historic England), the United Kingdom Institute of Conservation (UKIC), and such others as may be appropriate to the effective execution of the project.

**3.9** Health and Safety is priority for Minerva Archaeology. The company undertakes to follow all relevant Health and Safety regulations, and all staff hold *Construction Skills Certification Scheme* (CSCS) cards covering Health and Safety. A risk assessment for the project has been prepared.

**3.10** Minerva Archaeology maintains full Employers' and Public Liability insurances and full Professional Indemnity insurance. Policy details are available on request.

## Project Stages

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### *Introduction*

**4.1** A programme of archaeological works is proposed to satisfy the local planning authority requirements, and the identified aims and objectives of the project, as described in the *Research Design*, above. It is intended to be an incremental process, the nature and extent of each new phase being dependent on the results of the foregoing stage(s). Each stage is subject to the approval of the local authority before it can proceed, and additional method statements may need to be prepared.

**4.2** Overall most projects will consist of at least one stage of evaluation, followed by mitigation if required. If significant, complex, extensive or unusual archaeological remains are encountered during either evaluation or mitigation, additional stages of work may include assessment of the material prior to publication.

### *Stage 1 – Evaluation*

**4.3** The first stage of work will involve trial trenching in the area affected by the proposed development. This work will contribute to evaluating the archaeological potential of the site. This approach is intended to characterise the complete stratigraphic sequence while minimising unnecessary destruction of the archaeological resource.

**4.4** Following the evaluation fieldwork, the findings will be reviewed in consultation with the local authority's archaeological advisors.

**4.5** If no remains of archaeological significance have been identified, and it is agreed that no further work on site is warranted, the trenches will be reinstated and a report on the results of the evaluation will be prepared in an appropriate form, for the approval of the local planning authority. The project records and material assemblage, will be prepared as an archive and deposited at a suitable museum/ repository.

### *Stage 2 - Mitigation*

**4.6** If remains of archaeological significance are identified, a report on the findings will be prepared to help inform the local authority, and aid their decision on the best approach to mitigate the effects of the development on the identified remains.

**4.7** In agreement with the local authority's archaeological advisors, an acceptable strategy, which may include further stage of works, will be developed. Further method statements may need to be prepared and approved.

**4.8** There are many forms of mitigation and depending on the nature of remains encountered, some areas may require different approaches across a site. Mitigation may include:

- Alteration of the development layout and/ or construction methodology to minimise the impact on archaeological remains.
- the appropriate recording and protection of the identified remains and their preservation in situ beneath the development;

- the open area investigation of all or part of the footprint of the development to allow for the appropriate recording of all identified archaeological features and deposits that meet the research criteria of the project;
- the monitoring of groundworks to ensure that an appropriate record is made of any archaeological features and deposits that are directly impacted by the development groundworks and that meet the research criteria of the project.

**4.9** On completion of the mitigation fieldwork, the findings will be reviewed in consultation with the local authority's archaeological advisors. If no new data have been recorded as a result of the mitigation strategy that was adopted, the previously prepared report will be updated, finalised and submitted for the approval of the local planning authority as the definitive report on the results of the project, and, subsequently, published in an appropriate form. The documentary and material archives for the project will also be finalised and deposited with the agreed suitable museum/ repository.

## Post-excavation and Results

### Introduction

**5.1** Upon completion of the fieldwork and data gathering, a report will be prepared, which draws together the results obtained so as to meet the aims and objectives of the project, as described in Section 2, above.

**5.2** The report will be produced in the standard Minerva Archaeology house style. Copies of the report will be provided to the curatorial authority, and additional copies will be lodged with the planning authority and deposited with the relevant museum.

**5.3** It is anticipated that the results of the present project would be combined with subsequent stages of work, if appropriate, and published in the local archaeological journal, or in an appropriate specialist academic journal, depending on the nature and complexity of the information recovered. The results of the present stage of work will be uploaded to the Archaeology Data Service's OASIS database together with any unpublished archive reports.

### Artefact Collection/ Retention

**5.4** In all projects, the decision to discard material will be taken on a case by case basis, in consultation with the appropriate materials specialists, and the HEA, and in line with the ClfA's Toolkit for Selecting Archaeological Archives, published collecting policy of the receiving museum or repository.

**5.5** It is the intention that all significant archaeological material will be collected on site. The Regional Research Agenda, Specialist guidance and site specific research aims will always drive the collection retention policy. However, the table below indicates the criteria for decisions about artefactual collection/ retention based on significance.

**5.6** Matching any criteria of a higher level of significance will increase the likelihood of retention.

Significance	Criteria	Retained?
High	Stratified; datable; diagnostic; informs projects aims and objectives; unusual	Yes
Medium	Stratified; dateable; undiagnostic; informs projects aims and objectives; cannot be identified in the field	Yes
Low	Unstratified; undateable; undiagnostic; does not inform projects aims and objectives; identifiable	Unlikely
Insignificant	Unstratified; modern; undiagnostic; likely imported material; does not inform projects aims and objectives; common	No

**5.7** Any material identified as potentially not for collection will be put aside on site, until the need to retain/ discard discussion with the curator can take place before the end of the fieldwork. Any uncollected material will be adequately recorded.

**5.8** Where large deposits of artefacts are encountered, a representative sample may be collected in agreement with the HEA.

**5.9** In the case of multiple stages, the retention and disposal of the individual components of the material archive will normally be assessed in detail, in line with the Toolkit for Selecting Archaeological Archives, prior to each stage.

### Copyright

**5.10** Minerva Archaeology 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 an non-exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the *Project Brief* and the *Written Scheme of Investigation*.

**5.11** Minerva Archaeology will assign copyright on completion of the project to the museum or repository undertaking the ultimate curation of the archive, but will retain the right to be identified as the author of all project documentation and reports as defined in the Copyright, Designs and Patents Act 1988 (Chapter IV, s.79).

### Archive Deposition

**5.12** On completion of all stages of the present project, it is intended that the full archive, including the documentary records owned by Minerva Archaeology, and the material records owned by the client and held in the care of Minerva Archaeology, will be deposited with Saffron Walden Museum.

### Archive and Report Preparation

**5.13** A summary on the results of the present investigation can be made available within one week of the completion of the fieldwork, if requested, and will include an assessment of the archaeological importance of the remains.

**5.14** The report will conform to industry standards and guidance, and typically include the following:

- Table of contents and summary
- Introduction with planning background and outline of scheme
- Historical and archaeological background to the site
- Site topography and geology
- Aims and objectives of the investigation
- Methodology employed in the field and during post excavation
- Location of archive deposition
- Objective descriptions of trenches, areas, and features investigated and recorded over the duration of the project
- Artefacts and ecofacts concordance and assessment
- Discussion of the results in accordance with the projects aims and objectives and, relative to regional/ national research frameworks
- Conclusions and confidence rating

- List of sources consulted
- List of illustrations
- Scaled plans and sections of the site and features
- Plates of trenches, areas, features and significant finds encountered

**5.15** Supplementary documents may also be included, as appropriate (Appendices);

- Trench information table
- Table of recorded contexts
- Specialist Reports
- OASIS summary

**5.16** The archive and complete report will normally be available within six weeks of the completion of the entire fieldwork programme.

## DIGITAL MANAGEMENT PLAN

**5.17** Minerva Archaeology is committed to following best practice and guidance to safely store and safeguard all digital data collected or created as part of the current project.

**5.18** Mark Sycamore, as the designated officer, has overall responsibility for the company digital data.

**5.19** Standard methods of data collection will be applied throughout the project. Methods of collection will meet the requirements of the HEA.

**5.20** Currently, Minerva Archaeology field data records are primarily recorded on a range of card pro-forma and, where appropriate, in permatrace drawings. Information in digital format is also used including digital photographs, drawings and survey data if appropriate. However data created during a project may be supplemented by third party information, primary records may also be digitised. Digital data will be produced during the course of producing reports and disseminating results.

**5.21** In the course of the project, due to the nature of the work, certain data will be collected. This may include data provided by the Land owner and or developer, any other contractors related to the project and the Local Planning authorities. This data may contain information relevant to the project such as architectural plans, topographical surveys, etc or professional or personal contact details.

## File Formats

Category	Format	Stored	Backup
Digital Mapping	CAD (DXF, TCW)	NAS drive	External drive
Digital Mapping	GEOTIFF	NAS drive	External drive
Digital Drawings	GIS (QGIS)	NAS drive	External drive
Digital Drawings	Scans (TIFF, PNG, JPEG)	NAS drive	External drive
Project Tracking	Excel (XLS)	NAS drive	External drive
WSI	Word (doc, docx)	NAS drive	External drive
Finds Concordance	Excel (XLS)		External drive
Report	Word (doc, docx)	NAS drive	External drive
Pro-forma	Word (doc, docx)	NAS drive	External drive
Digital Pro-forma	Excel (XLS)	NAS drive	External drive



email	webmail	Cloud	Cloud
Digital Photographs	(RAW, TIFF)	NAS drive	External drive
Digital Survey data (GPS)	CAD (DXF)	NAS drive	External drive
Third party documentation and reports	Word (doc, docx) and pdf	NAS drive	External drive

### Project File Structure

**5.22** All digital project data is stored on a central network drive. This network drive is incrementally backed up at the end of each day onto a separate drive.

**5.23** Each project has a unique project number consisting of the letters MA (for Minerva Archaeology) followed by a number.

**5.24** A folder structure is standardised across every project, each subdivided for the separate storage of files for General information, Tender, WSI, Post excavation, Important emails, Drawings, Archiving, Digital Photographs

**5.25** Digital photographs are uploaded into folders named by date. During the preparation of the report, shots that are to be used are copied into a specific report folder.

**5.26** Filenames of documents and files have version numbers or may contain a 'Final' designation. For example, *MA\_123\_Report\_text\_V2* or *MA\_123\_Report\_text\_Final*.

### Metadata

**5.27** A metadata summary will be included in the report. A working copy will be on Minerva Archaeology's network server.

**5.28** Metadata tables for each data type will be populated during the life cycle of the project and will use standard format for each data type as recommended by ADS, who are the intended repository for the digital data archive.

**5.29** Data documentation will meet the requirements of the project brief, museum deposition guidelines and digital repository guidelines and the methodology laid out in the written scheme of investigation (WSI).

**5.30** An archive catalogue documenting both physical and digital archive records will be maintained

### Security

**5.31** All devices that have access to digital project data have suitable antivirus installed and are kept up to date (either f-secure or win 10 windows defender). Systems are also maintained with available, regular security updates. Access to sensitive files is restricted as they are stored in drives invisible to most of the network and password protected. Access to the network is protected by firewall, and remote access is allowed through limited secure machines, with secure web application installed (Splashtop).

### Live Storage

**5.32** With the exception of emails, which are cloud stored, all company and project based data is stored on a Raid 5 network drive (NAS). An incremental backup of all

files on the network drive is made at the end of every 24 hour period. Further copies of project sensitive data are also held at remote locations.

**5.33** Sufficient data storage space is available on Minerva Archaeology's server. The server is accessible by staff on and offsite via a secure log-in.

### **Long-term Storage**

**5.34** It is anticipated that digital project files will be stored on the network drive for at least a year after the completion of the project. Files may be archived onto secure storage within five years of the project completion.

### **Archiving Data**

**5.35** Deposition of digital data will be in accordance with current guidelines (ClfA/ ADS/ AAF/ Historic England), and the requirements of the appropriate museum or repository. The site's digital data will be deposited with the Archaeological Data Service.

**5.36** Deselection of project data from the project archive will be reviewed over the duration of the project. Deselection of data will be in accordance to ClfA's Selection Toolkit for Archaeological Archives

**5.37** In the normal course of a project, some files will not be included in an archive, such as:

- Commercially sensitive emails
- Records for administration purposes, such as timesheets and mileage forms
- Draft versions of reports and digital drawings
- Intermediate scans used for preparation of drawings, or already imbedded into other documents included in the archive.
- Redundant digital photographs (copies or working shots)
- Third party data that have a time-limited licence, such as HER data
- Third party documents not produced or commissioned by Minerva Archaeology Ltd.

### **GDPR**

**5.38** Minerva Archaeology recognises its responsibilities towards the way it collects, stores and uses personal/ sensitive information. It will comply with current guidance under General Data Protection Regulations (GDPR), and Minerva Archaeology's Data Policy. All data covered by the regulations will be stored securely, with access restricted. The Information Commissioner's Office (ICO) will be notified if a breach occurs, defined as a security incident that has affected the confidentiality, integrity or availability of personal data held by the company.

## Bibliography

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### Site Specific

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## Method Statements

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### Archaeological Evaluation Method Statement

#### *Fieldwork Methodology*

**6.1** The location of the trenches will be surveyed in relation to Ordnance Survey national grid by triangulation from known points. The final location of the trenches will be adjusted according to circumstances encountered on site.

**6.2** Within each trial trench, overburden will be removed down to the first significant archaeological horizon using a mechanical excavator fitted with a toothless ditching bucket. Spoil will be scanned visually and using a metal detector in order to assess the presence and survival of artefactual material in the overburden.

**6.3** All exposed archaeological features and deposits will be cleaned by hand and sampled as appropriate according to their accessibility, so as to ascertain their nature, depth, date and quality of preservation, while ensuring that unnecessary destruction of discrete features is minimised. As a general rule, 50% of discrete features will be sampled and 20% of stratified archaeological deposits, but these proportions may vary in discussion with HEA according to circumstances encountered on site.

**6.4** Pre-excavation plans of each open trench (where potential features and deposits have been identified) will be drawn at a scale of 1:50 on polyester draughting film together with a longitudinal section or profile of the trench. Post-excavation plans of all exposed archaeological features will be drawn, at a scale of 1:20 on polyester draughting film. Sections of excavated features will be drawn at a scale of 1:10. Intermediate contexts will be drawn in the space provided on pro-forma record forms, or on polyester draughting film as appropriate.

**6.5** A detailed context record will be maintained on individual pro-forma record cards, designed to meet current professional standards. Each layer, fill, cut etc., will be individually numbered and described in terms of soil detail, stratigraphic position, dimensions, artefact content, samples and interpretation.

**6.6** A photographic record of each trial trench, and each archaeological feature or deposit, will be maintained in digital format using high quality DSLR equipment. Lenses and film types will be chosen to suit the prevailing conditions. Photographs of archaeological features will include an appropriate scale (including vertical scales used in combination with horizontal scales for deep sections), north arrow and a photo board (which will contain a site code and context number). A complete register of all photographs will be included in the archive.

**6.7** All finds relating to the archaeological record of the site will be collected with reference to context and location. Finds processing will take place alongside the site work and will entail cleaning, marking, appropriate storage, quantification and initial classification. Primary conservation of artefacts will take place on site, and be supplemented by appropriate storage prior to selection for specialist attention. All registered finds will be recorded three-dimensionally in situ, either by offset measurement or by extrapolation from polar coordinates. A metal detector will be available where appropriate.

**6.8** Provision will be made for sampling and analysis of environmental data by appropriate specialists. All sampling will be carried out in accordance with the guidelines set out Environmental Archaeology (English Heritage 2011) and with reference to Environmental Archaeology and Archaeological Evaluations (Dobney et al. 1995). If a context is suitable, contains datable material and demonstrates a potential for environmental information, a standard 40 litre sample will be taken.

**6.9** Should human remains be encountered, their location will be marked and they will be left in situ. Any decision on further investigation or removal of human remains will be the subject of a separate agreement between Minerva Archaeology, their clients, and the appropriate authorities including the HEA.

**6.10** Should remains falling within the terms of the Treasure Act (1996), or collections of artefacts or ecofacts which are considered to be of particular significance be uncovered during the fieldwork, the HEA, the Coroner's office, and the Portable Antiquities Scheme officer will be contacted (as appropriate) and their advice sought.

**6.11** The physical security of all archaeological deposits, features and artefacts, both on and off the site, will be a central concern and all reasonable measures will be taken to ensure their protection before, during and after excavation.

**6.12** Subject to any requirement for a further work, and with the agreement of the HEA and of the client, the trenches will be backfilled on completion of the evaluation but no further reinstatement will take place.

**NOTE:** No geotechnical or contamination report has been provided for the present site. The archaeological fieldwork will go ahead, but all on-site staff will wear appropriate PPE, including gloves, with other PPE, such as masks, being available if required. Nevertheless, should a readily identifiable contaminant, such as asbestos, be encountered during the archaeological investigations, the excavation team will withdraw from the affected area until it has been appropriately cleared. Responsibility for this will remain with the client.

## **RESOURCES AND PROGRAMMING**

### **Fieldwork**

Duration: 3 to 10 days  
Staff: 1 x project officer  
1 x assistant project officer

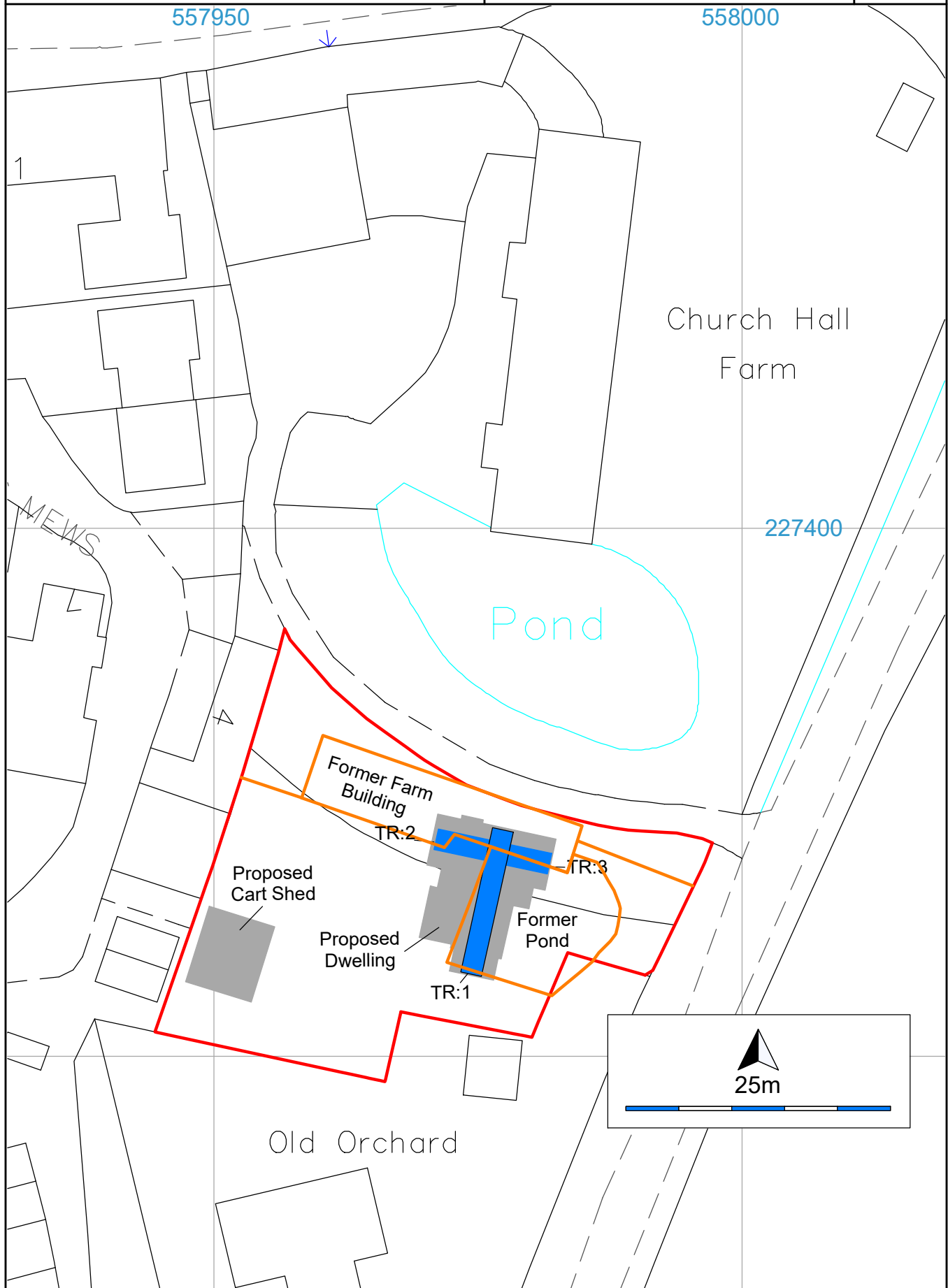
### **Public Engagement**

**6.13** It is unlikely that there will be any scope for public engagement during the current project. However, if significant remains are discovered in the course of the project, with approval of HET, Minerva Archaeology may attempt to promote and disseminate information to local interested parties, and if appropriate, and safe, arrange public visits to site.

### **Timetable**

**6.14** The evaluation fieldwork has not yet been timetabled.





Location of former pond and farm building

Scale 1:500

Figure 3



### Appendix 1

Fieldwork Risk Assessment			
<b>Site Name:</b>	Church Hall Farm, Broxted, Essex	<b>Ref:</b>	MA 459
<b>Project Type:</b>	Archaeological Evaluation	<b>Date:</b>	12/09/ 2023
<b>Signed:</b>	CT	<b>Approved:</b>	MS
<b>Overall Risk BEFORE Mitigation</b> (Low, Low-Moderate, Moderate, High-Moderate, High)			
<b>Moderate</b>			
<b>Overall Risk AFTER Mitigation</b> (Negligible, Low, Low-Moderate, Moderate, High-Moderate, High)			
<b>Low - Moderate</b>			

Remember mitigation measures **MUST** be put in place for hazards with a PR score of 4 or above

#### Abnormal Risks (Site Specific)

Hazard		At Risk	Potential injury	Appropriate Action (Mitigation)	Calculated Risk			
Process	Type				LO	PS	PR	MR
None								

**All hazards need to be monitored during a project and reassessed if methodologies change significantly.**

**Key:** Likelihood of hazard occurrence (LO) 1=Rare; 2=occasional; 3= very likely

Potential Severity of injury (PS) 1=negligible; 2=minor injury; 3=serious injury/ fatal

Perceived Risk (PR) Calculated using (LO x PS)

Mitigated Risk (MR) 1=V.Low; 2=Low; 3=Normal; 4=Proceed with Caution; 5=Unacceptable

**IF MITIGATED RISKS (MR) IS 5 OR HIGHER THAN THE RISK IS UNACCEPTABLE WITHOUT FURTHER ACTION TAKEN**

Hazard		At Risk	Potential injury	Appropriate Action (Mitigation)	Calculated Risk			
Process	Type				LO	PS	PR	MR
<b>Arriving and Departing</b>								
Loading/ unloading vehicle	Carrying too much equipment; dropping equipment	All users	Back injury; foot injury; minor cuts	Follow the manual handling procedures; training in safe lifting; caution while loading tools	2	2	4	3
Transport to and from site	Traffic accident; vehicle fire	All users	Serious injury or death	Vehicles kept in good order; all drivers have company vehicle test; properly maintained fire extinguisher in vehicle	1	3	3	2
Parking vehicles	Run down or traffic accident	All drivers	Serious injury or death	Park in designated areas on site or find a safe place to park; do not park on pavements or obstruct highways.	1	3	3	2
<b>Site Conditions</b>								
On site	Adverse hot weather conditions, hot/cold/ rain/ snow	All on site	Dehydration; heat-stroke; sunburn of varying degrees of severity. Increased likelihood of falling ill; exposure	Use high factor sun creams/ sunblock; drink at least 1.5-2 litres of water; take regular breaks in shade. Wear suitable warm/ waterproof clothing; take shelter from extreme weather	2	2	4	3
On site	Extreme noise	All in vicinity	Serious damage to hearing	Wear approved ear defenders; limit the time of exposure to sound.	2	3	6	4
On site	Contamination; hazardous waste	All in vicinity	Irritant of varying degrees of severity; Serious disease or death	Wear suitable protective suits; gloves and appropriate breathing apparatus; Avoid contact, direct or close proximity with harmful substances.	2	3	6	4
On site	Lone working	Worker	Injury without help or support.	Inform colleagues of whereabouts. Maintain communications with office. Carry mobile phone on your person – switched on, charged & in credit.	3	2	6	4
Ground conditions	Tripping, or falls on uneven ground	All on site	Serious injury; muscle strains	Wear PPE; clearance if possible; Caution when walking across site, particularly when carrying equipment. Look where you are going.	2	3	6	4
Vegetation, Plants, bushes and trees	Trips and falls, unsafe or low tree branches	All in vicinity	Serious injury; minor cuts; muscle sprains; tetanus; stomach illness; allergic reaction varying degrees of severity; poisoned	Wear PPE; If possible clear area of vegetation. Avoid direct contact with vegetation likely to cause allergic reaction; do not eat any unknown berries or fruit.	1	3	3	2

Hazard		At Risk	Potential injury	Appropriate Action (Mitigation)	Calculated Risk			
Process	Type				LO	PS	PR	MR
Animals	Bitten, chased or stood on by large animals (e.g. cows/ horses) Contact with animal excrement or urine.	All in vicinity	Serious injury; cuts; disease	Wear PPE; If possible, request the removal of farm animals from site prior to start of work; adequate washing facilities on site. Know the symptoms of animal borne diseases.	1	3	3	2
Biting/stinging insects	Bites, stings, infection.	All in vicinity	Irritation; minor injury; disease	Wear PPE; apply suitable repellent where necessary; avoid known nests; if necessary, have nests removed.	2	2	4	2
<b>Fieldwork</b>								
Vicinity of heavy machinery	Run down or struck by mechanical arm.	All in vicinity	Serious injury or death	Wear high visibility PPE; keep out of operating radius of machines; work with a banksman; keep within driver's field of vision.	2	3	6	4
Overhead Services	Striking overhead cables; machine arcing to power cables	All in vicinity	Serious injury or death	Never machine close to overhead services; when moving beneath overhead services the machine arm must be as low as possible and supervised; Wear PPE; Check developers plans; use a cat scan; consult with on site foremen/ surveyor; assume all services are live	2	3	6	4
Buried services	Striking electric cables; breaking foul water drainage	All in vicinity	Serious injury or death; stomach illness	Wear PPE; Check developer's plans; use a cat scan; consult with on site foremen/ surveyor; assume all services are live; avoid contact with foul water.	2	3	6	4
Buried services	Gas pipelines	All in vicinity	Serious injury or death	Check service maps, do not mechanically excavate near pipes, call 0800 111 999 in an emergency and evacuate site.	2	3	6	4
Open excavations	Falls into excavations	All in vicinity	Serious injury or death	Adequate fencing; safety notices; hazard tape around trenches and other excavations. Look where you are going.	2	3	6	4
Deep excavations	Collapse of excavations	All in vicinity	Serious injury or death	Excavations should be fenced off; adequate gap between stockpiled spoil and excavation edge; professional shoring and/ or stepping or battering the sides; wear PPE; Secured ladders for access; do not enter unsafe excavations.	2	3	6	4

Hazard		At Risk	Potential injury	Appropriate Action (Mitigation)	Calculated Risk			
Process	Type				LO	PS	PR	MR
Buried features	Sudden voids, ground collapsing	All in vicinity	Serious injury or death	Care should be taken when walking or standing on known buried features, particularly cellars and suspected wells. Access to any identified void should be restricted using fencing, appropriate safety equipment should be used	1	3	3	2
Human remains	Contact with decayed human matter	All in vicinity	Infection and disease of varying severity	Human remains to be handled in accordance with ClfA guidelines and the terms of the Home Office licence; gloves, masks & protective overalls should be worn as necessary.	1	3	3	2
Portable electrical devices	Lights and generators	Operative	Serious injury or death.	Ensure all electrical devices, cables and fittings are in good condition. Do not use any damaged equipment. Do not use generators in confined space. Where appropriate use 110volt equipment.	1	3	3	2
Excavation tools	Hitting self or others nearby	All in vicinity	Serious injury; minor cuts	Wear PPE; training in the safe use of tools; don't work too closely together.	2	3	6	3
Wheelbarrows	Tipping over; collapsing excavation sides	All in vicinity	Serious injury; back injury; muscle strains	Barrows should be properly maintained; don't overload barrows; don't use barrows in wet slippery conditions; ensure barrow runs are adequately far away from excavation sections and are not too steep	1	3	3	2
Survey equipment	Eye strain; looking into the sun	User	Serious injury to eyesight	Adequate training; never look at the sun through any optical device.	1	2	2	1
Site pegs/ markers	Tripping over; falling or walking into them	All in vicinity	Serious injury	Use protective footwear; All pegs/ markers should be sprayed and have protective caps.	2	3	6	3
Working on ladders/ raised platforms	Fall; dropping equipment	All in vicinity	Serious injury or death	Wear PPE; Working at height should be avoided. Excavations should be stepped to allow access. all ladders should be properly maintained and properly secured at the top and base; access to the area beneath ladder/ platform should be restricted; only access scaffolding that has been erected by an approved certified contractor; mechanical platforms should be operated by trained professionals only	2	3	6	4

Hazard		At Risk	Potential injury	Appropriate Action (Mitigation)	Calculated Risk			
Process	Type				LO	PS	PR	MR
Vicinity of overhead work	Struck on the head by falling objects	All in vicinity	Serious injury or death	Avoid working beneath others working overhead; wear PPE; Make sure that everyone working overhead is aware of your presence below; work with a banksman	2	3	6	4
Structures	Struck by falling debris; buried under collapsing walls/ buildings	All in vicinity	Serious injury or death	Wear PPE; do not undermine walls; do not enter unsafe structures	1	3	3	2
Structures	Dust; air pollution; confined spaces	All inside structure	Breathing difficulties; loss of consciousness	Adequate fresh air supply; wear appropriate face masks; take regular breaks; only those with professional training should enter a confined space	1	2	2	1
Structures	Debris, broken glass, bird/animal droppings	All inside structure	Trips or falls; minor cuts; disease	Wear PPE; area should be cleared; wear gloves and avoid contact with animal droppings; adequate washing facilities	2	2	4	3
Unexploded ordnance	Unearthing of unexploded ordnance	All in vicinity	Serious Injury or death.	Evacuate site (at least 100m) and contact police.	1	3	3	2
<b>Site facilities</b>								
Toilets	Contact with human waste	All users	Sickness; disease	Provide adequate hygienic facilities for the size of work force. Site toilets to be clean, regularly emptied & maintained, and washing facilities provided	1	2	2	1
Site office	Trips, falls; fire; electrical shock	All users	Serious Injury or death	Furniture, heaters, cookers, lights and fixtures are to be in good condition and properly maintained. Fire fighting appliances need to be in good working order; Passageways need to be kept open. Look where you are going when moving around office. Fire escapes to be well marked.	2	3	6	3
<b>Site Visitors</b>								
Visitors	Trips, falls; run down or struck by heavy vehicles	All visitors	Serious Injury or death	Restrict access to site using adequate fencing; wear PPE; Visitors must be accompanied at all times; On larger sites visitors should be undergo an on-site health & safety induction	2	3	6	3

Hazard		At Risk	Potential injury	Appropriate Action (Mitigation)	Calculated Risk			
Process	Type				LO	PS	PR	MR
Vicinity of hostile clients/ landowners	Assault, Harassment	Individuals	Serious physical or verbal assault	Do not put yourself in danger. Make written appointments; if overtly hostile take colleague or police officer. If there is a clear danger leave site.	1	2	2	1