

M54 to M6 Link Road
TR010054

8.18 Written Scheme of Investigation for
Archaeological Trial Trenching
Evaluation

Regulation 5(2)(q)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

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Infrastructure Planning

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Procedure) Regulations 2009**

**M54 to M6 Link Road
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**8.18 Written Scheme of Investigation for Archaeological Trial
Trenching Evaluation**

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1 Introduction

- 1.1.1 Linkconnex (the Archaeological Consultant) has been commissioned by Highways England (the Client) to design the archaeological works in advance of the development of the proposed M54 to M6 Link Road in South Staffordshire (the Proposed Scheme).
- 1.1.2 The Proposed Scheme would provide a link between Junction 1 of the M54 and Junction 11 of the M6. The Proposed Scheme aims to reduce congestion on local and regional routes, particularly the A460 and A449, and deliver improved transport links to encourage the development of the surrounding area.
- 1.1.3 Previous phases of archaeological investigations consisted of geophysical survey and archaeological monitoring of ground investigation (GI) works.
- 1.1.4 This document forms the Written Scheme of Investigation (WSI) for the completion of trial trench evaluation within the Proposed Scheme boundary.
- 1.1.5 The works specified in this document will be undertaken by a competent and suitably qualified Archaeological Contractor (the Archaeological Contractor) who should be a Registered Archaeological Organisation with the Chartered Institute for Archaeologists. They will be employed by the Main Works Contractor (the Contractor). This document sets out the methodology, specification and protocol to be adhered to during the completion of the archaeological fieldwork, interim reporting and preparation of the fieldwork report which will be completed by the Archaeological Contractor. In addition, the requirements and responsibilities of both the Archaeological Contractor, the Archaeological Consultant, the Contractor and the Client have been set out to assist the Archaeological Contractor in the completion of the archaeological works.
- 1.1.6 This document has been produced by the Archaeological Consultant on behalf of the Client and has been approved by the County Archaeologist for Staffordshire.
- 1.1.7 This document is valid for a period of six months, after which it will be reviewed by the Archaeological Consultant and may need to be revised, updated or amended in order to accommodate changes to policy, legislation, standards and guidance, good practice, changes in design associated with the project or following the results of on-going archaeological fieldwork.

2 Background Information

2.1 The Scheme

- 2.1.1 The Proposed Scheme includes the reconstruction of M54 Junction 1 and M6 Junction 11 with provision of a dual carriageway link road between. The Proposed Scheme would bypass the villages of Featherstone and Shareshill to the east of the existing A460.
- 2.1.2 An application for Development Consent Order (DCO) for the Proposed Scheme was submitted to the Planning Inspectorate in January 2020. A decision is not anticipated on the application until late 2021.

2.2 The Site

- 2.2.1 The Site comprises a number of agricultural fields, each assigned their own field number, which will be impacted by the Proposed Scheme.
- 2.2.2 The bedrock geology within the Site consists of Chester formations of sandstone and conglomerate. The superficial geology consists of Devensian Till deposits with patches of alluvium (clay, silt, sand and gravel) (BGS online). The soils comprise loamy and clayey soils (Soilscapes online).

2.3 Archaeological Background

- 2.3.1 The archaeological background of the Proposed Scheme and a 1km study area, including previous archaeological investigations, has been presented in detail as part of the Cultural Heritage chapter of the Environmental Statement [Application Document Number TR010054/APP-045/6.1] published by Highways England in 2020. The following section is summarised from that document. Terminology and definitions can also be found in that document.
- 2.3.2 There are 26 listed buildings comprising two Grade I, three Grade II* and 21 Grade II listed buildings located within the study area. In addition, there are 13 historic buildings and structures, including seven locally listed buildings/structures and 59 non-designated archaeological assets, dating from the prehistoric to modern periods, located within the study area.
- 2.3.3 There are no World Heritage Sites, Scheduled Monuments, Registered Battlefields, Registered Parks and Gardens or Conservation Areas located within the study area.
- 2.3.4 There are four sites of prehistoric date recorded within the vicinity of the scheme. The earliest of these is the find spot of a Neolithic axe (SJ 9342 0492). The find spot of a Bronze Age palstave axe (SJ 945 065) is also recorded. Prehistoric settlement evidence is very limited and includes a possible burnt mound (SJ 9484 0688) and the site of a possible barrow (SJ 94 05). It is possible that some of the cropmarks in the northern part of the scheme (SJ 9565 0723), of unknown date, may have their origins in the later prehistoric period, or the Roman period.

- 2.3.5 There are two recorded sites of Roman (AD 43 to 410) date within the area. The exact location of both sites is unknown, and they comprise the alleged site of a Roman tumulus (SJ 95 08) and the find spot of a silver denarius coin of Hadrian (SJ 93 04). To the west, is the Roman road between Featherstone and Pennocrium, near the modern village of Penkridge, where there is a cluster of scheduled Roman settlement and military sites.
- 2.3.6 There is only one site of early medieval date (AD 410 to 1066) recorded. This is the deserted settlement of Hilton or Haltone (SJ 952 054), which is centred around Hilton Park. The settlement was first recorded in the very late 10th century and is recorded in the Domesday Book. The date of desertion is not known, and no above-ground evidence survives within the current park.
- 2.3.7 There are a number of sites with evidence of medieval date (1066 to 1500). A moated site is located at Hilton Park (SJ 9518 0518), which has been built over by the 18th century house. The remainder of the medieval sites are related to agricultural activity and include evidence for ridge and furrow (SJ 9567 0805 and SJ 9446 0621), as well as the site of a windmill (SJ 948 071) and cropmarks of a medieval field system (SJ 9546 0770).
- 2.3.8 Recorded sites of post-medieval date (1500 to 1900) located in the area predominantly relate to the agricultural use of the landscape, as well as evidence for increasing industrial activity in the 18th and 19th centuries.
- 2.3.9 The Streetway and Wordsley Green Turnpike Road was established in the mid-18th century. This largely follows the line of the A460 to the west of the proposed scheme, joining the A4601 to the north of the M6 Toll. A possible boundary marker in the form of a low bank may have also been followed by a former road or track.
- 2.3.10 Within the route of the proposed scheme there are seven archaeological sites and one historic park. The archaeological sites comprise the Streetway and Wordsley Turnpike Road and five areas of cropmark features of unknown date at the northern extent of the scheme.
- 2.3.11 The historic park is Hilton Park associated with Hilton Hall. It is a non-designated historic park that has been defined as Historic Parkland within South Staffordshire Local Plan. The park is associated with Hilton Hall and was probably established in the mid to late 18th century with some of the landscape work attributed to Humphry Repton (1752 – 1818). Originally, the park covered an extensive area of land, part of which is now covered by gravel pits, while the M6 Toll and the M54 bisect the park to the south and east.
- 2.3.12 The Proposed Scheme is located within the setting of Hilton Hall, a Grade I listed building (NHLE 1039174) constructed c.1720-1730. A number of associated structures are also listed buildings, including the coach house and stable block (Grade II NHLE 1374117), a pair of early 18th century gate piers (Grade II NHLE 1039175), an early 19th century conservatory (Grade I NHLE

11039176) and the Portobello Tower (Grade II NHLE 1374118). Also, within Hilton Park is a moated site of medieval origin, a 19th century farm named Tower House Farm and Little Saredon Manor, a 16th century house with an earlier moat. This route option is also in close proximity to the Featherstone HECZ.

- 2.3.13 There is potential for previously unrecorded archaeological remains to be found along the route. While remains of any period cannot be discounted, remains associated with the later prehistoric periods and the medieval and post-medieval landscape is considered to be most likely to be discovered.

2.4 Previous Archaeological Investigations

- 2.4.1 A programme of archaeological investigations has been undertaken in support of the Proposed Scheme and results are presented in detail as part of the Cultural Heritage chapter of the Environmental Statement [Application Document Number TR010054/APP-045/6.1] published by Highways England in 2020. The following section is summarised from that document.

2.5 Geophysical Survey (Phase SI 2019)

- 2.5.1 A geophysical survey was undertaken by Phase Site Investigations Ltd in March-April 2019. There were 19 areas proposed for survey, although three areas were not surveyed due to livestock being present in the fields (see Appendix A for area details). The full survey report can be found in Appendix 6.3 of the Proposed Scheme's Environmental Statement [TR010054/APP-171/6.3].
- 2.5.2 There were nine anomalies recorded by the survey. Two anomalies were recorded in Area 5, just north of Hilton Hall, and are thought to represent drainage. Areas 7 and 8 are both located to the south-east of Shareshill, and anomalies were recorded in each. Area 7 recorded three anomalies thought to represent current agricultural practices and possible drainage features. Area 8 recorded two anomalies which were both recorded as isolated positive responses and, while it is thought they are of human origin, their function and date is unknown. Areas 11 and 16 are both located at the north-western end of the Scheme and both recorded anomalies. The anomaly recorded in Area 11 consists of two curvilinear trends either representing sub-surface features or the intersection of different agricultural regimes. The anomaly recorded in Area 16 as an alignment of trends is also thought to represent a sub-surface feature of unknown function. The results of the geophysical survey can be seen on Figure 1 in Appendix B.
- 2.5.3 Other responses from the survey mainly consisted of strong magnetic disturbances of made ground and modern disturbances as well as relatively weaker linear responses of agricultural activity.
- 2.5.4 The survey concluded that the majority of the anomalies identified related to modern material or objects related to agricultural activity or geological

variations. No clear patterns were identified indicating relationships between the anomalies.

2.6 Archaeological monitoring of the GI (ADAS 2019)

- 2.6.1 Monitoring was undertaken by ADAS in July 2019. A total of 19 trial pits and 31 boreholes were monitored. There were no archaeologically significant deposits or artefacts observed from the trial pits. Twenty of the boreholes contained made ground, which indicated the ground has been extensively landscaped and altered during the construction of modern highways. The full GI monitoring report can be found in Appendix 6.2 of the Proposed Scheme's Environmental Statement [TR010054/APP/6.3].

3 Scope of Works

- 3.1.1 The archaeological trial trench evaluation outlined in this Scope of Works will form the first phase of evaluation as outlined in the Mitigation Strategy to be prepared by Linkconnex. The number and layout of the trenches have been designed to appropriately evaluate the land within the footprint of the Proposed Scheme, including compounds, ponds, borrow pits and statutory diversions. There are a number of locations within the Order Limits (as defined by the Draft Development Consent Order [Application Document Number REP2-006] which will not be impacted by intrusive works and therefore these have been excluded from the areas proposed for evaluation trenching.
- 3.1.2 The total trenching amounts to 2.75% of the areas that have been identified as physically being affected by the Scheme. A contingency of 1% will also be allowed in order to assist with determining the character and significance of any archaeological features encountered during the evaluation trenching or test pitting.
- 3.1.3 The proposed trenches and their dimensions are outlined in Table 1 below. The location of these trenches can be seen on Figure 1 in Appendix B.

Table 1 Summary of Trench Details

Approx. trench length (m)	No. of trenches
30	8
50	150
Total	158

3.2 Scheme Objectives

- 3.2.1 The general objectives of the trial trench evaluation are:
- to confirm the presence or absence of surviving archaeological remains;
 - to determine the location, nature, extent, date, condition, state of preservation, significance and complexity of any archaeological remains;
 - to determine the likely range, quality and quantity of artefactual and environmental evidence present;
 - to provide an interpretation of the results and place them in their local, regional and national archaeological context;
 - to assess the potential for palaeoenvironmental deposits to be present and to take appropriate samples that will be used to inform any requirement for further, specialist recording; and to produce a report on the findings of the fieldwork and to inform the development of further archaeological mitigation strategies for the Proposed Scheme.

3.3 Research Frameworks and Regional Research Agendas

- 3.3.1 Consideration of research themes is key to understanding the potential evidential significance of archaeological remains.
- 3.3.2 The results of the geophysical survey concluded that the majority of the anomalies identified related to modern material or objects related to agricultural activity or geological variations and there were no clear patterns to indicate relationships between the anomalies.
- 3.3.3 Research agendas and themes are outlined in the document The Archaeology of the West Midlands. A framework for research (Watts 2011) will be consulted so that the archaeology can, if possible, be placed within their local, regional and national context.
- 3.3.4 The research agendas and specific themes for the trial trench evaluation will be considered as the project progresses and outlined in the fieldwork report (refer to Section 7).

4 Works Specification

4.1 General Requirements

- 4.1.1 All archaeological works will be carried out in accordance with this WSI and any further instructions from the Contractor and the Archaeological Consultant. This design takes account of the guidance provided by the Chartered Institute for Archaeologists (CIfA) Code of Conduct (CIfA 2019), the Standard and Guidance for Archaeological Field Evaluation (CIfA 2020a) and other current and relevant good practice and standards and guidance (refer to Appendix C).
- 4.1.2 The Archaeological Contractor will undertake the works according to this WSI and any subsequent written variations. No variation from or changes to the WSI will occur except by prior agreement with the Archaeological Consultant in consultation with the County Archaeologist for Staffordshire.

4.2 Specific Requirements for the Archaeological Contractor

- 4.2.1 The Archaeological Contractor shall prepare and submit a method statement, programme and risk assessment for the works prior to the commencement of the fieldwork. The method statement shall be submitted to the Archaeological Consultant, the Contractor and the County Archaeologist for Staffordshire for their review and approval.
- 4.2.2 The Contractor will provide the Archaeological Contractor with georeferenced Ordnance Survey mapping for the works area, and the proposed scheme layout.
- 4.2.3 To ensure the successful completion of the archaeological trial trench evaluation, the Archaeological Contractor shall:
- provide a method statement and risk assessment inclusive of a safe method of working;
 - provide suitably qualified and competent staff who have valid Construction Skills Certification Scheme (CSCS) cards. In addition, the project manager should ideally be a named Member of the Chartered Institute for Archaeologists (MCIfA) who is adequately qualified to manage the required archaeological work in line with the guidance set out in the CIfA code of conduct (2019) or can demonstrate an equivalent level of competence;
 - provide and monitor/maintain safe access into the trial trenches. No staff are to enter the trenches if it is declared unsafe by any competent person or the archaeological site supervisor;
 - provide suitably qualified archaeologists, experienced in archaeological investigation, recording and the nature of archaeological deposits which are expected on this site;

- work with the Contractor and the Archaeological Consultant to safely complete the archaeological site works;
- provide all hand tools and recording materials required to complete the archaeological evaluation; and
- ensure that during the archaeological trial trench evaluation the extent of any surviving archaeological deposits are mapped, and that any surviving archaeological remains are hand cleaned, defined and sample excavated, sufficient to determine type, plan form and relationships and that these are recorded. The archaeology should be characterised, and the significance and extent of the archaeology encountered determined.

4.2.4 The Archaeological Contractor is required to make a photographic record of the access routes and trench location before and after the trenching works in each location.

4.3 Specific Requirements for the Archaeological Consultant

4.3.1 The Archaeological Contractor will provide a programme of estimated date and time at each trench location and identify preferred routes into and out of the area(s). The Archaeological Consultant or the Archaeological Consultant's Stakeholder Team (the Stakeholder Team) will arrange land access with the landowner and determine access protocols and any specific requirements the landowner may have regarding arisings storage or reinstatement. Designated routes into and out of the area(s) will be identified by the Archaeological Consultant as agreed with landowners and will be adhered to by the Archaeological Contractor at all times.

4.3.2 The Archaeological Contractor will be required to make contact with the Archaeological Consultant or the Stakeholder Team land access co-ordinator, to arrange land access. The Contractor will also be required to provide an onsite contact that can be provided to the landowners in the event or questions or concerns regarding the works. This may be a member of the archaeological onsite team.

4.3.3 The archaeological works shall not extend beyond the specified extent shown on Figure 1 in Appendix B without the agreement of the Archaeological Consultant and the approval of the County Archaeologist for Staffordshire.

4.3.4 The Archaeological Contractor will notify the Archaeological Consultant immediately of any areas that cannot be opened and will provide a clear explanation for the situation

4.3.5 The Archaeological Consultant will provide the Archaeological Contractor with any available details for known overhead or buried services. However, it will remain the responsibility of the Archaeological Contractor to identify and avoid any buried or overhead services on Site. Utility Plans should be dated no older than three months and updated searches for services may need to be carried out by the Contractor.

- 4.3.6 The Contractor will provide the Archaeological Contractor with any available details for site specific hazards including the presence of contaminated land or the threat of unexploded ordnance and will brief the Archaeological Contractor as to their location and the process for dealing with these issues on Site.
- 4.3.7 Access to the Site and instruction for suitable and safe access/egress will be arranged by the Contractor and communicated to the Archaeological Contractor by the Archaeological Consultant.
- 4.3.8 The Contractor will allow for adequate time for the trenches to be archaeologically investigated and any surviving archaeological remains to be excavated and recorded.

4.4 Ecological Considerations

- 4.4.1 Consultation with AECOM's the ecology and landscape consultants for the Proposed Scheme has identified the following constraints to machine excavation:
- a 3m stand-off from hedgerows will be maintained;
 - the stand-off area for trees will comprise the extent of the canopy plus 3m;
 - trees within hedgerows will also require the stand-off to comprise the extent of the canopy plus 3m; and
 - a 10m stand-off will be maintained from all watercourses.
- 4.4.2 These considerations outweigh the location of trenches. Trenches will be relocated or shortened if necessary, in order to observe the ecological and landscape considerations. However, the trench design has taken these considerations into account.
- 4.4.3 During the excavation work the Archaeological Contractor will make provision to allow for the egress of wildlife from trenches that are left open overnight. This may be in the form of a ramp or the sloping of one end of the evaluation trench.

4.5 Machine Excavation

- 4.5.1 All trial trenches will be excavated at the locations indicated in Figure 1 in Appendix B. The trenches shall be positioned to an accuracy of ± 100 mm of the specified trench location using survey-grade GPS or equivalent metric-survey equipment.
- 4.5.2 Each trench location will be scanned by the Archaeological Contractor using a Cable Avoidance Tool (CAT scanner) and Genny prior to and during the excavation (mechanical excavation and hand excavation) to ensure that no live services are present.

- 4.5.3 Each trench will be opened under direct archaeological supervision using an appropriate mechanical excavator fitted with a toothless ditching bucket. Where necessary recent concrete or tarmacadam surfacing will be broken out and stored separately from other arisings.
- 4.5.4 All trenches shall be excavated to the dimensions indicated in Table 1. These dimensions are for the base of the trench. Where necessary to achieve this the trenches will be stepped to ensure stability and safety of the excavation and that safe access/egress and working conditions are maintained.
- 4.5.5 The arisings from the archaeological works will be stored adjacent to each trench (within a safe working distance) and will be separated according to material, (i.e. topsoil separated from subsoil).
- 4.5.6 At each trench location three test pits will be dug (one at each end and one in the centre) to test for the presence and prevalence of unstratified archaeological finds. The samples of topsoil and subsoil could be excavated by machine or by hand and each would be 0.25m by 0.25m in size to the depth of the plough soil/topsoil. The samples should be sieved (6mm wire mesh) on site or retained for immediate sieving off site. Should the sieving result in substantial quantities of archaeological artefacts the trenching strategy will be amended to allow for a better understanding of the factors behind the evidence.
- 4.5.7 The excavation will proceed under direct archaeological supervision, in broadly level spits of no more than 200mm, until either the top of the first archaeological horizon or undisturbed natural deposits are encountered. Particular attention should be paid to achieving a clean and well-defined horizon with the machine. It is not anticipated that entire trenches will require hand cleaning. Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits. The surface achieved through machine excavation will be inspected for archaeological remains. The mechanical excavator will not traverse any stripped areas.
- 4.5.8 If important concentrations of artefacts suggestive of significant activity are uncovered during machining, these should be left in situ in the first instance, and investigated using hand tools only.
- 4.5.9 Machined surfaces will be cleaned by hand sufficiently to allow acceptable definition of the archaeological remains. Following cleaning, all archaeological remains will be planned, to enable the selection of features and deposits for sample excavation by the Archaeological Contractor.
- 4.5.10 The trenches will be clearly demarcated and secured with appropriate barrier fencing if required by the Archaeological Contractor or the Contractor. Any required fencing will be supplied by the Archaeological Contractor, to ensure that persons or plant cannot inadvertently traverse across the area of investigation whilst archaeological works are in progress. The fencing will be

regularly inspected and maintained by the Archaeological Contractor until works in each area have been completed.

- 4.5.11 Due to the possibility of encountering field drains during machine excavation, the Archaeological Contractor will ensure that any field drainage pipes damaged during the excavation are repaired prior to backfilling and that the landowner or tenant has opportunity to inspect the repairs.

4.6 Hand Excavation

- 4.6.1 Any archaeological deposits/features identified will be cleaned and hand excavated in an archaeologically controlled and stratigraphic manner, sufficient to meet the aims and objectives of the investigation. Hand excavation will initially be targeted to provide information on the form, function and date of the feature. Stratigraphic relationships between features will be investigated and recorded.

- 4.6.2 The following sampling strategies will be employed for hand excavation:

- Linear features: A minimum sample of not less than 10% of the length, where the depositional sequence is consistent along the length. Multi-phase linear features with complex variations of fill type will be sampled sufficiently in order to understand the phasing and sequence of deposition. Where substantial features are identified an alternative sampling strategy will be discussed and agreed with the County Archaeologist. Where possible one section will be located and recorded adjacent to a trench edge. If appropriate all intersections will be investigated to determine the relationships between features. All termini will be investigated.
- Discrete features: All smaller discrete features will be excavated. Pits and other isolated features will normally be half-sectioned, but smaller features such as post-holes should be fully excavated. A minimum requirement to meet the project objectives will be agreed in consultation with the Consultant. If large pits or deposits (over 1.5m diameter) are encountered, then the sample excavated should be sufficient to define the extent and maximum depth of the feature and to achieve the objectives of the evaluation but should not be less than 25%.
- Structures: Each structure will be sampled sufficiently to define the extent, form, stratigraphic complexity and depth of the component features and its associated deposits to achieve the objectives of the evaluation. All intersections will be investigated to determine the relationship(s) between the component features. The remains of all upstanding walls will be hand cleaned sufficient to understand their dimensions, extent, composition, sequence and relationships.
- Flint scatters: in particular where associated with buried land surfaces will require hand cleaning and three-dimensional plotting prior to recovery;

- Timber structures and artefacts: will require expert recording and conservation until they are assessed fully.

4.7 Recording

- 4.7.1 The perimeter of each trench and all archaeological remains within the trenches will be recorded in plan using metric survey-grade equipment (or its equivalent).
- 4.7.2 A full written, drawn and photographic record will be made of each trench, even where no archaeological features are identified. Hand drawn plans and sections/elevations of features/ structures will be produced at an appropriate scale (normally 1:50 for plans and 1:10 or 1:20 for sections/elevations). A representative section of each trench will be drawn at a scale of not less than 1:50 but only after the features within the trench have been excavated. All plans and sections will include spot heights relative to Ordnance Datum in metres, correct to two decimal places.
- 4.7.3 Photography (digital, colour transparency and / or monochrome negative photographs) will be taken in line with current industry best practice and the requirements of the local authority (refer to Appendix C). In addition to records of archaeological features, a number of general site photographs will also be taken to give an overview of the site. Particular attention should be paid to obtaining shots suitable for displays, exhibitions and other publicity.

4.8 Artefact Recovery

- 4.8.1 All artefacts will be collected, stored and processed in accordance with standard methodologies and national guidelines (refer to Appendix C) and in line with local authority requirements.
- 4.8.2 Except for modern artefacts all finds will be collected and retained and the Archaeological Contractor will clarify in their Method Statement, their site-specific Selection Strategy and will ensure that it is in line with the ClfA Toolkit for Selecting Archaeological Archives (ClfA 2020c), other ClfA guidance (2020b) and relevant local authority guidelines. Each find will be recorded in accordance with the ClfA Toolkit (ClfA 2020c),
- 4.8.3 All recovered artefacts will be stabilised, conserved and stored in accordance with the current national conservation guidelines and standards (refer to Appendix C). If necessary, a conservator will visit the site to undertake 'first aid' conservation treatment. If waterlogged organic materials are encountered and appropriate cold storage facilities are not available onsite, the project manager will arrange the removal of the finds to nearby suitable facilities.
- 4.8.4 Artefacts will be stored in appropriate materials and conditions and monitored to minimise further deterioration.

4.9 Environmental Sampling

- 4.9.1 The Archaeological Contractor will include an environmental sampling strategy within their Method Statement, created by the Archaeological Contractor's Environmental Specialist. The Historic England Science Advisor will be consulted regarding the sampling strategy proposed by the Archaeological Contractor. In addition, the Archaeological Contractor's Environmental Specialist will visit the Site to ensure that the agreed sampling strategy is appropriately implemented and to offer specialist advice when required.
- 4.9.2 Any samples taken must come from securely stratified deposits using the methodologies outlined by Historic England in the Centre for Archaeology Guidelines No.1, 'Environmental Archaeology; A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation' (2011).
- 4.9.3 Appropriate provision will be made for the recovery of material suitable for scientific dating. Any samples taken must come from appropriately cleaned surfaces, be collected with clean tools and be placed in clean containers. They will be adequately recorded and labelled, and a register of all samples will be kept. Once the samples have been obtained, they should be stored appropriately in a secure location prior to being sent to the appropriate specialist. Provision will be made for the ongoing processing and initial assessment of sampled material in order to provide timely feedback regarding quality of preservation and significance of specific deposits during the evaluation and to inform the ongoing strategy.
- 4.9.4 Samples will be taken from securely stratified, dateable deposits, with a low risk of contamination. A provisional sampling strategy is proposed in Table 2.

Table 2: Provisional environmental sampling strategy for evaluation

Potential data	Method	Context type	Sample size (ltr)	Excavated feature sample
CPR	Bulk	Structural/occupation features	40	100%
		Pits (prehistoric)	40	50%
		Pits (Roman)	40	50%
		Pits (medieval)	40+	50%
		Pits (post-medieval)	40	50%
		Gully/ditch (settlement)	40	10%
		Gully/ditch (outfield)	40	5-10%
Waterlogged and organic rems	Bulk	All contexts	10-20	Layer (N/A)

Potential data	Method	Context type	Sample size (ltr)	Excavated feature sample
Small bones	Bulk	All contexts	40	50
Molluscs	Incremental	Deposit sequence	As advised by specialist	N/A
Pollen	Monolith	Deposit sequence	As advised by specialist	N/A

4.9.5 If large deposits of animal bone are encountered the advice of the project specialist will be sought regarding recording and sampling. Animal bone groups (i.e. articulated animal remains) will be assigned a number and documented using a suitable animal bone group sheet following Historic England guidance (2019). Assessment of biological remains will follow standard assessment procedures as laid out in Historic England guidance (2008; 2011; 2019).

4.10 Finds Processing

4.10.1 Initial processing of finds (and if appropriate other samples) will be carried out concurrent with the fieldwork.

4.10.2 The processing of finds will be finished shortly after completion of the investigations, the finds will be retained (according to the Selection Strategy), washed, marked, bagged and logged on a MS Access or GIS database (or equivalent), together with their locations according to the requirements set out in the Selection Strategy (e.g. 'significant finds' will be recorded on the OS National Grid (eastings, northings) and Ordnance Datum (height) to two decimal places).

4.10.3 The finds assemblage will be treated, labelled and stored in accordance with the appropriate Historic England guidance documents, local authority guidelines (if appropriate) and the Institute of Conservation guidelines (refer to Appendix C). The Archaeological Contractor will ensure that the processing of the assemblage is in accordance with the requirements of the recipient museum.

4.10.4 Each category of find or each material type will be examined by a suitably qualified archaeologist or specialist and the results incorporated into the fieldwork report.

4.11 Human Remains

4.11.1 If human remains are discovered during the course of the trial trench evaluation the remains shall provisionally, in accordance with current best practice, be covered and protected and left in situ. The removal of human remains, if this is deemed necessary in consultation with the Archaeological Consultant and the County Archaeologist for Staffordshire, will only take place in accordance with a Ministry of Justice licence and under the appropriate Environmental Health regulations and the Burial Act 1857. In the

event of the discovery of human remains the Archaeological Contractor will arrange to contact H.M. Coroner and will notify the Archaeological Consultant and the Client immediately.

4.12 Treasure

- 4.12.1 Any artefacts which are recovered that fall within the scope of the Treasure Act 1996 and Treasure (Designation) Order 2002 will be reported to the Archaeological Consultant immediately. Artefacts that are defined as Treasure according to the above legislation will be vested in the franchisee (e.g. The Duke of Cornwall is franchisee for Cornwall), or if none, the Crown. The Archaeological Contractor will contact H.M. Coroner, and will ensure that the Treasure regulations are enforced and that all the relevant parties are kept informed. A list of finds that have been collected that fall under the Treasure Act and related legislation will be included in the fieldwork report.
- 4.12.2 Artefacts that are classified as 'treasure' will be removed to a safe place but where removal cannot be achieved on the same working day as the discovery, suitable security measures must be taken to protect the finds from damage or unauthorised removal.

5 Monitoring, Progress Reports and Meetings

- 5.1.1 The archaeological evaluation will be subject to regular monitoring visits by the Archaeological Consultant who will have unrestricted access to the site, site records or any other information. The work will be inspected to ensure that it is being carried out to the required standards and that it will achieve the stated objectives.
- 5.1.2 Weekly written progress reports (via e-mail each Monday by 10.30am) will be provided to the Archaeological Consultant by the Archaeological Contractor during the archaeological investigation. In addition, the Archaeological Contractor will inform the Archaeological Consultant and the Contractor on the progress of the fieldwork verbally upon request.
- 5.1.3 Progress meetings between the Contractor, the Archaeological Consultant, the County Archaeologist for Staffordshire and the Archaeological Contractor will be held on site during the course of the evaluation. Officers from Historic England will also be invited to attend, if appropriate. These meetings will be arranged by the Archaeological Consultant.
- 5.1.4 The Archaeological Contractor will only accept instruction from the Archaeological Consultant and the Contractor.

6 Completion of Fieldwork

- 6.1.1 Trenches will not be backfilled without the approval of the Archaeological Consultant, the Contractor and the County Archaeologist for Staffordshire. In exceptional circumstances, such as for health and safety purposes or ground stability reasons, some backfilling would be permitted. The trenches shall only be backfilled by machine under appropriate conditions and with direct archaeological supervision. Arisings will be returned strictly in the correct sequence and will not be compacted.
- 6.1.2 The Site will be left in a tidy condition and the Archaeological Contractor will ensure that all materials brought onto Site are removed.
- 6.1.3 At the end of the archaeological evaluation the Archaeological Contractor shall complete the following:
- completion statement submitted to the Archaeological Consultant and the Client within one working day of completing the fieldwork; and
 - an OASIS entry. If appropriate the entry should include caveats about conclusions drawn in advance of assessment and/or analysis.
- 6.1.4 The OASIS entry may be updated and re-submitted not later than three months after the completion of the fieldwork report. The Archaeological Contractor is advised to ensure that adequate time and costings are built into their tenders to allow sufficient time to complete the form.

7 Deliverables

7.1 Method Statement

7.1.1 The Method Statement should include the following sections as a minimum (see ClfA 2020a Standard and Guidance for Archaeological Field Evaluation for further information):

- A statement on the technical, research and ethical competences of the project team, including relevant professional accreditation;
- Site location (including map) and descriptions;
- Context of the project;
- Geological and topographical background;
- Archaeological and historical background;
- General and specific research aims of the project, with reference to Regional Research Frameworks;
- Methods;
- Details of how soil will be separated on site, where required;
- Collection and disposal strategy for artefacts, ecofacts, and all paper, graphic and digital materials;
- Arrangements for immediate conservation of artefacts;
- Details of backfilling, which shall include measures to ensure that any field drainage pipes damaged during the excavation are repaired prior to backfilling and that the landowner or tenant has opportunity to inspect the repairs;
- Post-fieldwork assessment and analysis of project data;
- Report preparation (including details of the section headings);
- Publication and dissemination proposals, as required;
- Copyright;
- Archive deposition, including wherever possible identification of a recipient museum or other repository and its requirements;
- Timetable;
- Staffing. Details on the expertise of the project team is also required. The project manager should be a named Member of the Chartered Institute for Archaeologists (MCIfA) who is adequately qualified to manage the required archaeological work or who can demonstrate an equivalent level of competence. The composition and experience of the project team should be described. Specialists should be identified where required (e.g. for finds and environmental work).;
- A statement on compliance with relevant professional ethical and technical standards (including data standards);

- Health and Safety considerations;
- Environmental protection considerations;
- Monitoring procedures

7.2 Interim Report

7.2.1 Within two weeks of the completion of the evaluation, an interim report will be prepared and submitted to the Archaeological Consultant who will then submit it to the Client and the County Archaeologist for Staffordshire. It will include:

- A brief summary of the results of the evaluation;
- A plan of the trench locations; and
- A quantification of the primary archive including contexts, finds and samples.

7.3 Fieldwork Report

7.3.1 It is anticipated that the Fieldwork Report will be delivered within six weeks of the completion of the fieldwork. If specialist reports are not available within that period a draft report should be submitted detailing the missing information, and the revised date should be discussed with the Archaeological Consultant.

7.3.2 The Fieldwork Report will include the following:

- a signed QA sheet detailing as a minimum - title, author, version, date, checked by, approved by;
- a non-technical summary;
- a site location drawing;
- the archaeological and historical background;
- the methodology employed for the investigations;
- the aims and objectives of the investigations including relevant research themes and agendas identified;
- the results of the trial trench evaluation (to include full description, assessment of condition, quality and significance of the remains);
- where human remains are encountered the report will include a statement that addresses the future retention of the material, including if appropriate, options for reburial;
- an appendix containing specialist artefact, dating and environmental sampling reports;
- an appendix illustrating specific finds and general working shots or portraits of specific features or structures as appropriate;
- a list of all finds that fall within the scope of the Treasure Act and associated legislation;

- a stratigraphic matrix for each trench (as appropriate);
- assessment /conclusion and a statement of potential with recommendations for further work and analysis identifying specific research questions;
- a statement of the significance of the results in their local, regional and national context cross referenced to relevant research agenda;
- the current and proposed arrangements for long-term conservation and archive storage (including details of the recipient museum);
- general and detailed plans showing the location of each trench accurately positioned on an Ordnance Survey base map (at an appropriate and recognised scale);
- detailed plans and sections illustrating archaeological features (at an appropriate and recognised scale), including a long section of each trench that contains archaeological remains;
- a section and plan of 'negative' trenches, i.e. those containing no archaeological remains;
- colour photographic plates illustrating the site setting, work in progress and archaeological discoveries; and
- a cross-referenced index of the project archive.

7.3.3 The Fieldwork Report will specifically comment on the level of preservation and will comment on the character of the overlying deposits and on the potential for extrapolating the results into adjacent areas.

7.3.4 Digital copies of the completed draft report (complete with illustrations and plates) in both Word and PDF format will be submitted to the Archaeological Consultant for comment. If, in the opinion of the Archaeological Consultant, the draft report contains a large number of mistakes or significant omissions, then it is likely that the Archaeological Contractor will need to revise the draft report before it is finalised. When the draft report is of a sufficient standard, the Archaeological Consultant will submit a copy of the draft report to the Client and to the County Archaeologist for Staffordshire. In finalising the report, the comments of the Archaeological Consultant and the County Archaeologist for Staffordshire will be taken into account.

7.3.5 The final report will be submitted to the Archaeological Consultant within two weeks of the receipt of comments on the draft report.

7.3.6 A project archive including image files in JPEG or TIFF format and digital text files in Microsoft Word format, and illustrations in AutoCAD format or ArcView shapefile format shall be submitted. A fully collated version of the Fieldwork Report shall be included in PDF format.

8 Archive Preparation and Deposition

- 8.1.1 Archaeological material recovered from fieldwork is irreplaceable and data recorded in the course of archaeological investigations should be copied and additionally held securely in a separate location in line with current best practice (refer to Appendix C).
- 8.1.2 The Archaeological Contractor should compile a Data Management Plan in line with ClfA guidelines (2020b) and include it in their Method Statement.
- 8.1.3 The Site records and assemblages (list of fieldwork interventions, notebooks / diaries, context records, feature records, structure records, site geometry (drawings), photographs and films, finds records and associated data files) will constitute the primary Site Archive. This is the key archive of the fieldwork project and the raw data upon which all subsequent assessment and analysis and future interpretation will be based. The archive will therefore not be altered or compromised.
- 8.1.4 The Site archive should be quantified, ordered, indexed and made internally consistent, and in line with current good practice (refer to Appendix C). All finds and coarse-sieved, and flotation samples will have been processed and stored under appropriate conditions. The archive will also contain a site matrix, a summary of key findings and descriptions of artefactual and environmental assemblages. Arrangements should be made for the proper cataloguing and storage of the archive during the project life-cycle (it may be appropriate to liaise with an archive specialist). The content of an outline structure for a fieldwork archive is presented in MoRPHE, PPN3 Appendix 1, Product P1 and Product P3 (Historic England 2015).
- 8.1.5 The Archaeological Contractor will, prior to the preparation of the Archaeological Contractors Method Statement, liaise with Joseph Perry, Curator of Local History (Joseph.Perry@stoke.gov.uk) at the Potteries Museum and Art Gallery to obtain agreement in principle to accept the physical, documentary, digital and photographic archive for long-term storage. The Archaeological Contractor will be responsible for identifying any specific requirements, archiving costs or policies of the museum in respect of the archive, and for adhering to those requirements.
- 8.1.6 The evaluation will have its own unique accession number, which will be obtained by the Archaeological Contractor from the recipient museum in advance of the preparation of the Archaeological Contractors Method Statement, to ensure that the project is recorded in accordance with the requirements of the local authority. The unique accession number will be recorded in the Archaeological Contractors Method Statement.
- 8.1.7 The archive of finds and records generated during the fieldwork will be removed from the Site at the end of each day and kept secure at all stages of the project until it is deposited with the recipient museum. The archive will be produced to current national standards (refer to Appendix C).

- 8.1.8 The deposition of the archive forms the final stage of this project. The Archaeological Contractor shall provide the Archaeological Consultant with copies of communication with the recipient museum and written confirmation of the deposition of the archive.

9 Programme and Resources

- 9.1.1 The programme and key contacts for the project will be confirmed prior to the start of evaluation.
- 9.1.2 The Archaeological Contractor must ensure that they have adequate and appropriate management procedures in place to ensure that risks to the programme timetable (more extensive remains, better preserved deposits, exceptional finds, interruptions from periods of prolonged inclement weather and any delays due to the COVID-19 pandemic) can be identified at an early stage. These risks will be kept under constant review by the Archaeological Contractor to ensure that the aims and objectives are met within the agreed timetable and budget. The Archaeological Consultant and the Client will be notified at the earliest opportunity of any changes to the methodology or programme of work that arise from review.
- 9.1.3 Changes or variation to the programme will only be accepted after they have been agreed in writing with the Archaeological Consultant and the Client. The Archaeological Contractor shall give immediate warning to the Archaeological Consultant and the Client should any agreed programme date not be achievable.
- 9.1.4 In the event of significant, or important unanticipated archaeological discoveries (such as in situ flint scatters or human remains), the Archaeological Contractor will notify the Archaeological Consultant and the Contractor immediately. Appropriate resources and associated timescales must be provided by the Archaeological Contractor and agreed upon with the Archaeological Consultant and the Contractor so as to limit the risk to the construction programme whilst ensuring all necessary archaeological excavation and recording has been undertaken, to meet the aims and objectives of the evaluation. The Archaeological Consultant will inform the County Archaeologist for Staffordshire in the event of significant, or important unanticipated archaeological discoveries.

10 Confidentiality and Publicity

- 10.1.1 All communication regarding this project is to be directed through the Archaeological Consultant on behalf of the Client. The Archaeological Contractor will refer all inquiries to the Archaeological Consultant without making any unauthorised statements or comments. The Archaeological Contractor will not disseminate information or images associated with the project for publicity or information purposes without the prior written consent of the Client.
- 10.1.2 Publicity regarding the evaluation will be managed by the Archaeological Consultant on behalf of the Client.

11 Copyright

- 11.1.1 The Archaeological Contractor shall assign copyright in all reports, documentation and images produced as part of this project to the Client. The Archaeological Contractor shall retain the right to be identified as the author or originator of the material. This applies to all aspects of the project. It is the responsibility of the Archaeological Contractor to obtain such rights from sub-contracted specialists.
- 11.1.2 The Archaeological Contractor may apply in writing to use or disseminate any of the project archive or documentation (including images). Such permission will not be unreasonably withheld.
- 11.1.3 The results of the evaluation shall be submitted to the Client and the Staffordshire County Council Historic Environmental Record (HER) and will ultimately be made available for public access.

12 Insurances and Health & Safety

12.1 General

- 12.1.1 The Archaeological Contractor will provide the Archaeological Consultant and the Contractor with details of their public liability and professional indemnity insurance cover.
- 12.1.2 The Archaeological Contractor will have their own Health and Safety policies compiled using national guidelines, which conform to all relevant Health and Safety legislation and best practice. The Archaeological Contractor will compile a project-specific Health and Safety Plan which will be submitted to the Archaeological Consultant and the Contractor prior to the start of the evaluation.
- 12.1.3 A health and safety start-up meeting must be held with the Archaeological Contractor, the Archaeological Consultant and the Contractor, prior to the start of works to ensure a satisfactory Health and Safety Plan is in place and agreed with all parties.
- 12.1.4 The Archaeological Contractor shall prepare a Risk Assessment and Method Statement (RAMS) and submit this to the Archaeological Consultant and the Contractor for approval prior to the commencement of the fieldwork. If amendments are required to the RAMS during the works, the Archaeological Consultant, the Contractor and any other interested party must be provided with the revised document at the earliest opportunity.
- 12.1.5 The Archaeological Contractor's site supervisor will be qualified to Site Managers Safety Training Scheme (SMSTS) level. All other staff involved in the fieldwork should be CSCS qualified to a minimum standard as an 'Archaeologist Technician' (for Construction Related Occupation cards), Professionally Qualified Person (through accreditation with CfA) or Academically Qualified Person (through an archaeology degree). Staff CVs will include SMSTS and CSCS qualifications, including expiry dates.
- 12.1.6 The Archaeological Contractor shall provide the Archaeological Consultant and the Contractor with staff CVs of the Project Manager, Site Supervisor and proposed specialists. Site assistants' CVs will not be required (unless undertaking a task that requires training such as the use of CAT and Genny) but all site assistants should have an appropriate understanding of excavation procedures. Staff CVs will include CSCS qualifications, proof of CAT and Genny training (CAT4+ qualification) and other relevant H&S qualifications.
- 12.1.7 All site personnel will familiarise themselves with the following:
- site emergency and evacuation procedures;
 - the site's health and safety coordinator;
 - the first aider; and

- the location of the nearest hospital and doctor's surgery.
- 12.1.8 The Archaeological Contractors site supervisor will maintain a record of site attendance at the start of work for each day.
- 12.1.9 All site personnel will wear appropriate Personal Protective Equipment (PPE) in accordance with the requirements of the Contractor and as outlined in the Archaeological Contractor's approved RAMS. As a minimum, the PPE should consist of a hardhat, steel toe-capped boots with mid-sole protection, high-visibility vest or jacket, high visibility trousers, safety glasses and gloves. Additional PPE will be issued by the Archaeological Contractor as required, e.g. ear defenders, masks etc. In addition, site personnel will ensure that any visitors to the Site are equipped with suitable PPE prior to entry to the site.
- 12.1.10 All equipment must be 'fit for purpose' and be maintained in a sound working condition that complies with all relevant Health and Safety regulations and recommendations.
- 12.1.11 The Archaeological Contractor will undertake any necessary health and safety training and/ or inductions required by the Client and the Contractor.
- 12.1.12 The Contractor will provide a site specific health, safety and environment induction to the Archaeological Contractor prior to the works commencing.
- 12.1.13 The Archaeological Contractor will assure the provision and maintenance of adequate, suitable and sufficient welfare and sanitary facilities at appropriate locations for the duration of the works. The locations for temporary site welfare facilities and vehicle parking will be agreed with the Archaeological Consultant and the Contractor prior to the start of works.
- 12.1.14 The Archaeological Consultant will provide the Archaeological Contractor with the results of recently conducted service and utility searches; however, the Archaeological Contractor shall be responsible for identifying any buried or overhead services and taking the necessary precautions to avoid damage to such services, prior to and during the fieldwork. The Archaeological Contractor will ensure that any individual scanning for buried services is both competent and appropriately trained in the use of a CAT and Genny. Utility Plans should be dated no older than three months and updated searches for services may need to be carried out by the Archaeological Contractor.

12.2 COVID-19

- 12.2.1 The Health and Safety policies, Risk Assessments and project-specific Health and Safety Plan compiled by the Archaeological Contractor will address undertaking fieldwork during the Coronavirus COVID-19 pandemic. All work should be undertaken in line with the Client's Coronavirus guidance for site / project works and current government advice, including the Site Operating Procedures (Construction Leadership Council, 2020 and any subsequent updates).

- 12.2.2 The Archaeological Contractor's Risk Assessment and Health and Safety Plan shall address COVID-19 specific hazard controls; travel, site, welfare and accommodation; PPE and hygiene provisions; mental health and effects on people the site workers live with; and reporting procedures for site workers to raise any issues or concerns. They shall take account of changes to emergency procedures, factoring in, for example, increased emergency service response times and potential closures of A&E departments. Toolbox talks will adhere to social distancing.
- 12.2.3 The Risk Assessment and Health and Safety Plan will be clearly communicated to site workers with sufficient time prior to travel or commencement of work. All site personnel will familiarise themselves with site-specific COVID-19 mitigation measures. Signatures will be required to record that all site workers have attended appropriate site briefings and understood COVID-19 procedures. Site workers must be aware that COVID-19 controls (e.g. maintaining social distancing and hygiene standards) will take precedence until further notice. Site workers must adhere to the COVID-19 measures, controls and restrictions.
- 12.2.4 If tasks are identified that cannot be compliant with COVID-19 procedures, then work must not take place until further mitigation is put in place to remain compliant.
- 12.2.5 COVID-19 procedures will be under constant review as the situation evolves. The Archaeological Contractor and the Contractor will ensure that Risk Assessments are updated to reflect any changes to government advice and be issued prior to the commencement of or during the archaeological fieldwork.

13 References

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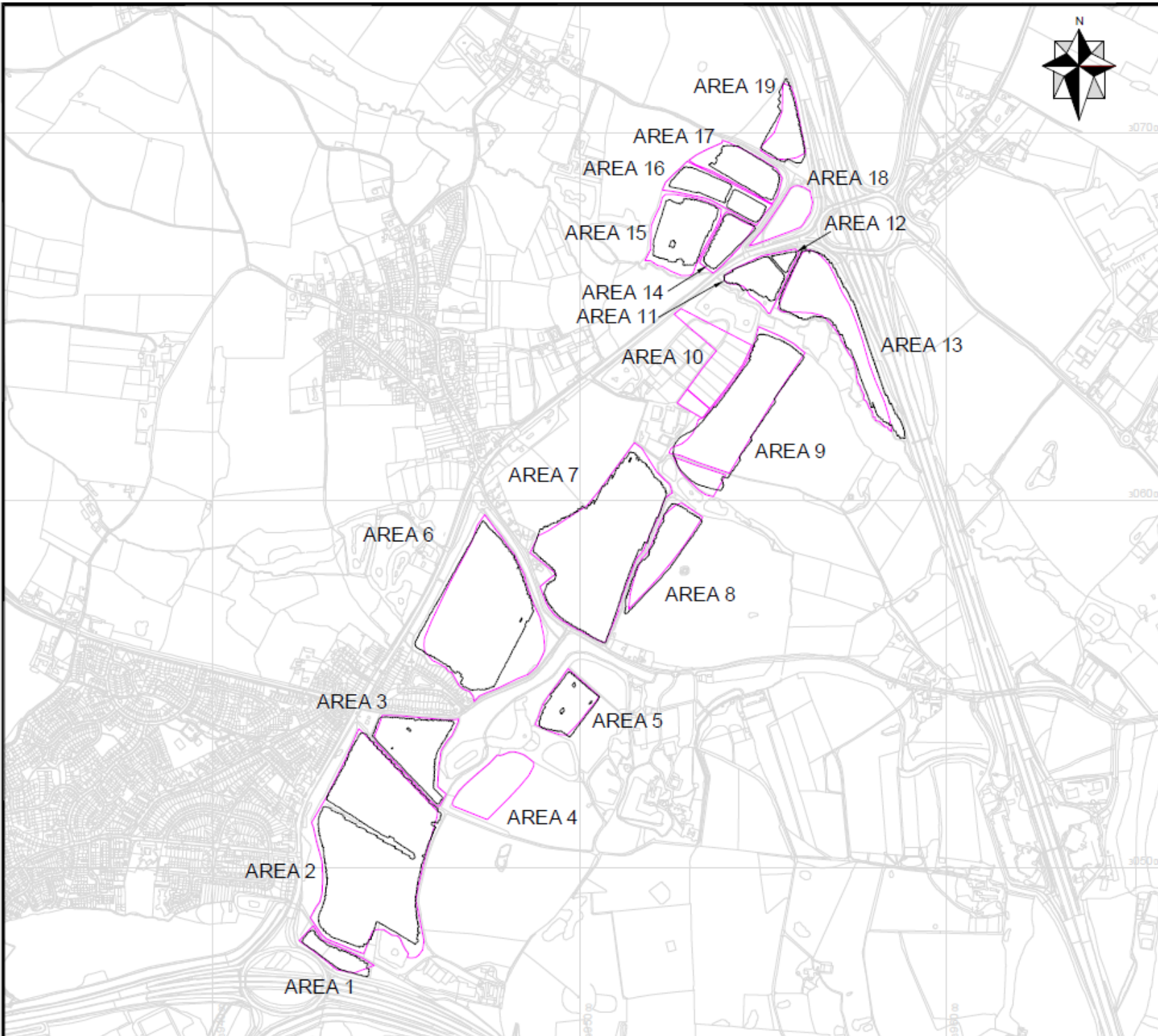
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Appendix A. **Location of geophysical area**

Phase SI (2019) M54 to M6/ M6 Toll Link Road Scheme, Staffordshire:
Archaeological Geophysical Survey. Phase Site Investigations Ltd



NOTES

1. THIS DRAWING MUST BE USED IN CONJUNCTION WITH THE ACCOMPANYING REPORT (ARC_2586_965_RPT.PDF) WHICH PROVIDES DETAILS OF THE TECHNIQUES EMPLOYED, THEIR INHERENT LIMITATIONS AND ANY SITE SPECIFIC ISSUES.
 2. THIS DRAWING IS BASED UPON AN EXTRACT FROM DRAWING 'Mapping.dwg' PROVIDED BY THE CLIENT. THE ORDNANCE SURVEY CO-ORDINATES OBTAINED FOR THIS SURVEY WERE MEASURED USING THE UKOSTN02 PROJECTION. THIS PROJECTION SHOULD BE TAKEN INTO ACCOUNT IF THE SURVEY GRID IS RELOCATED.
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- ALWAYS EXERCISE CAUTION WHEN EXCAVATING**

KEY

- SURVEY AREA
- EXTENTS OF MAGNETIC GRADIENT SURVEY



PHASE
SITE INVESTIGATIONS

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W: www.PhaseSI.com

Scale	(A3 Sheet)	Drawing	Status
1:10000		ARC_2586_965_02	FINAL

Client	AECOM LEEDS
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Site	M54 TO M6 / M6 TOLL LINK ROAD SCHEME STAFFORDSHIRE
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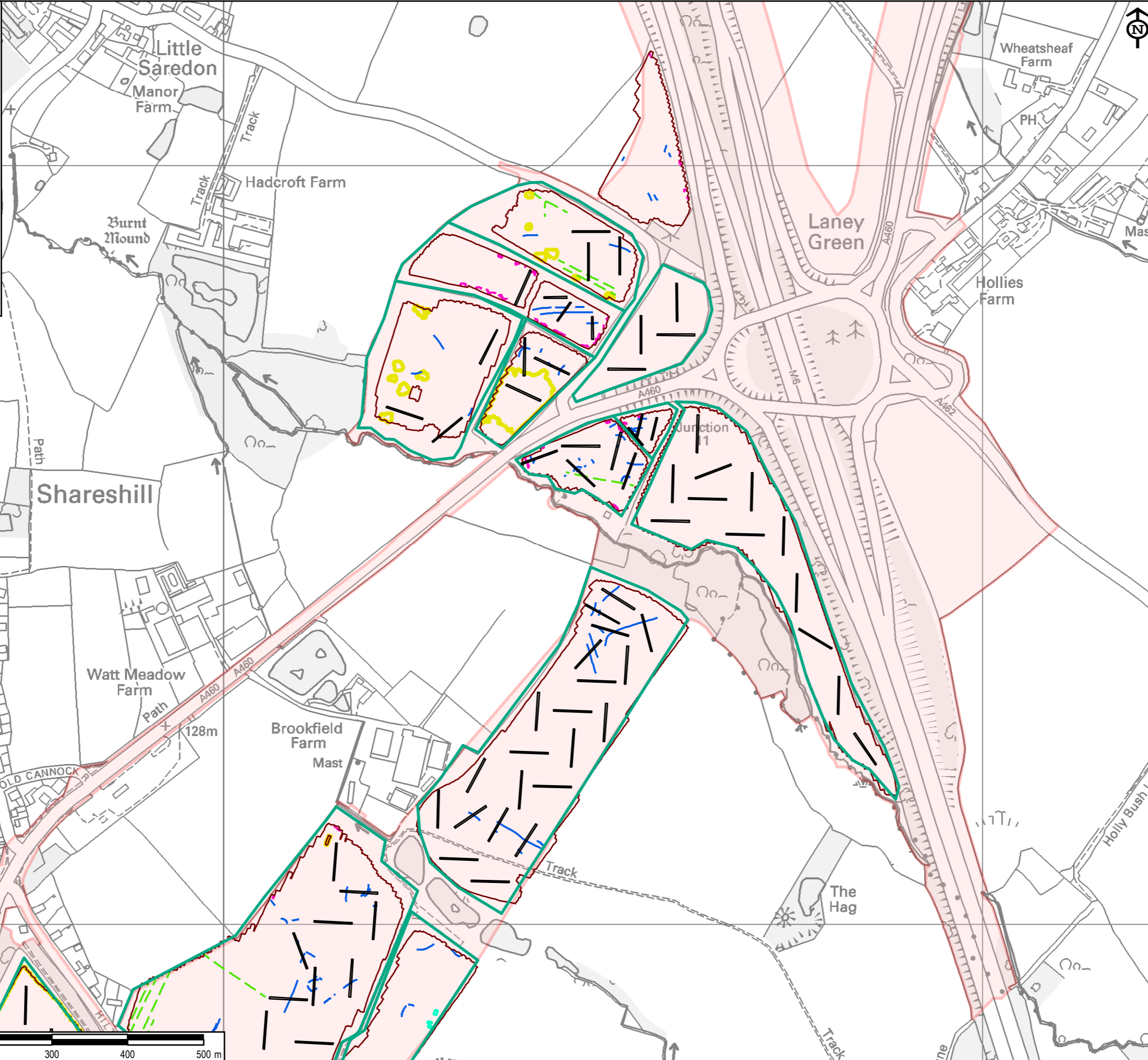
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Surveyed	JW, AB, CA	Drawn	JW
Chk.	NF	Date	10/04/2019

**Appendix B. Figure 1 - Draft trial trench locations with
archaeological geophysical survey**

LEGEND

- Scheme Boundary
- Trial Trench Location
- Trial Trench Area
- Archaeological Geophysical Survey
- Anomaly Type
 - Geophysical survey boundary
 - Bipolar Linear
 - Area of very strong dipolar/bipolar responses (Magnetic Disturbance)
 - Linear/Curvi-linear trend (Weak or diffuse response)
 - Linear/Curvi-linear positive response
 - Limit of very strong response



SAFETY, HEALTH AND ENVIRONMENTAL INFORMATION BOX

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CONSTRUCTION

MAINTENANCE / OPERATION / DECOMMISSIONING / DEMOLITION

NOTES

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Trench orientation amended	LC	FL	11/12/20	P02
First Issue	LC	FL	26/11/20	P01
Revision Details	By	Check	Date	Suffix

Purpose of issue
INTERNAL USE

Client
Highways England
The Cube
150 Wharfside Street
Birmingham
B1 1RN

Working on behalf of
highways england

Development Consent Order Number
TR010054

Project Title
M54 TO M6 LINK ROAD

Drawing Title
**DRAFT TRIAL TRENCHES WITH
ARCHAEOLOGICAL GEOPHYSICAL
SURVEY - SHEET 1 OF 3**

Designed	Drawn	Checked	Approved	Date
LC	LC	FL	HM	11/12/2020

Internal Project No.
60624053

Suitability
S8

Scale @ A3
1:5,000

Zone
M54 to M6 Link Road

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LINKCONNEX
TRANSFORMING HIGHWAYS TOGETHER

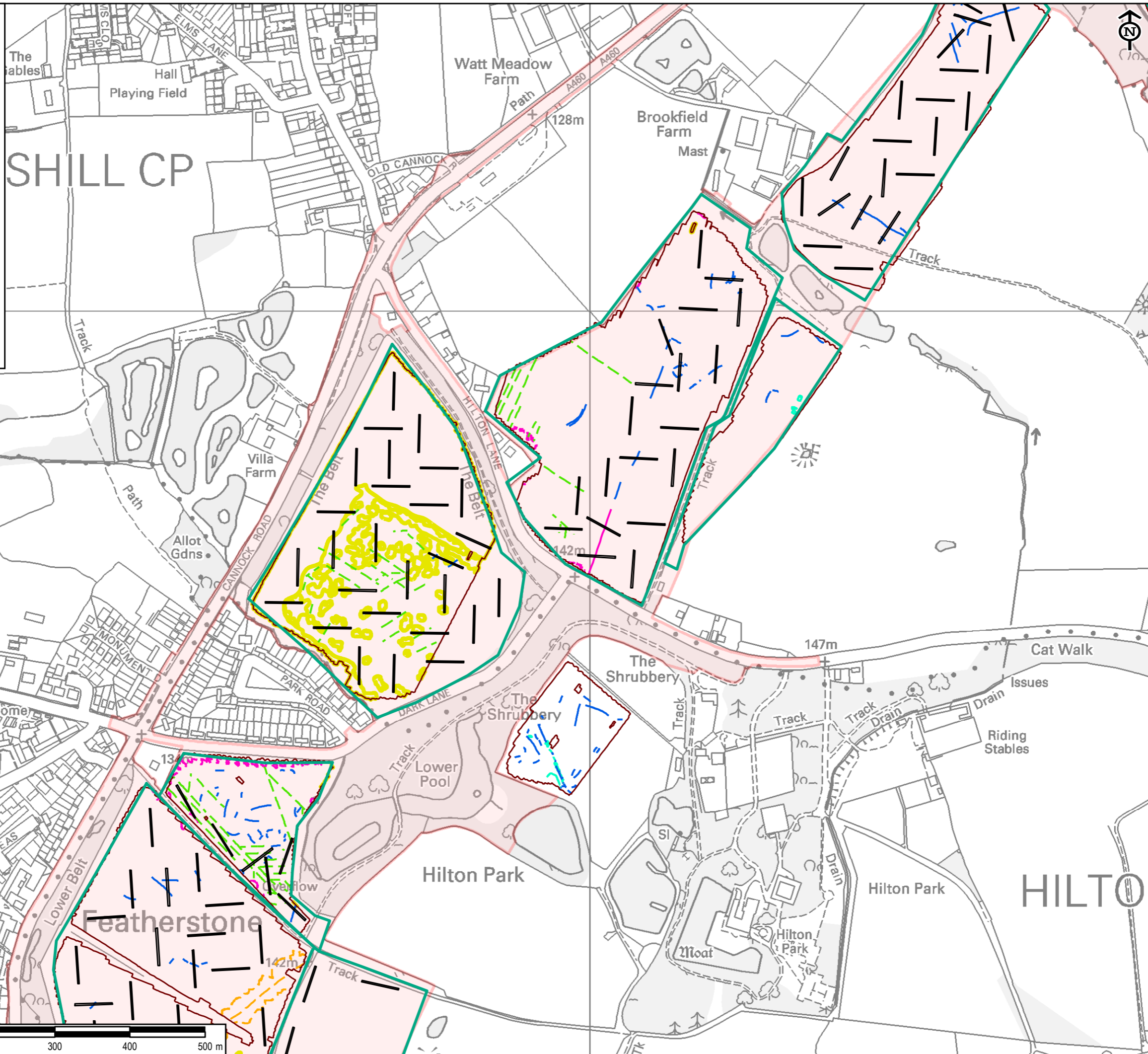
BAM Nuttall Limited St James House Knoll Road Cambridgeley GU15 3XW www.bamnuttall.co.uk	AECOM Limited Royal Court Basill Close Chersterfield Tel: +44 (0) 1246 209221 www.aecom.com
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Drawing Number Highways England PN HE514465 M54_SW_PR_Z	Originator -BAM	Volume -EHR - -DR -LH -0001	Rev P02
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Plot Date: 11 December 2020 15:52:33
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LEGEND

- Scheme Boundary
- Trial Trench Location
- Trial Trench Area
- Archaeological Geophysical Survey
- Anomaly Type
- Geophysical survey boundary
- Bipolar Linear
- Bipolar linear (showing linear response and extent of anomaly)
- Area of very strong dipolar/bipolar responses (Magnetic Disturbance)
- Linear/Curvi-linear trend (Weak or diffuse response)
- Negative linear
- Linear/Curvi-linear positive response
- Limit of very strong response



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MAINTENANCE / OPERATION / DECOMMISSIONING / DEMOLITION

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Trench orientation amended	LC	FL	11/12/20	P02
First Issue	LC	FL	26/11/20	P01
Revision Details	By	Check	Date	Suffix

Purpose of issue
INTERNAL USE

Client
Highways England
The Cube
159 Wharfedale Street
Birmingham
B1 1RN

Working on behalf of
highways england

Development Consent Order Number
TR010054

Project Title
M54 TO M6 LINK ROAD

Drawing Title
DRAFT TRIAL TRENCHES WITH ARCHAEOLOGICAL GEOPHYSICAL SURVEY - SHEET 2 OF 3

Designed	Drawn	Checked	Approved	Date
LC	LC	FL	HM	11/12/2020

Internal Project No.
60624053

Suitability
S8

Scale @ A3
1:5,000

Zone
M54 to M6 Link Road

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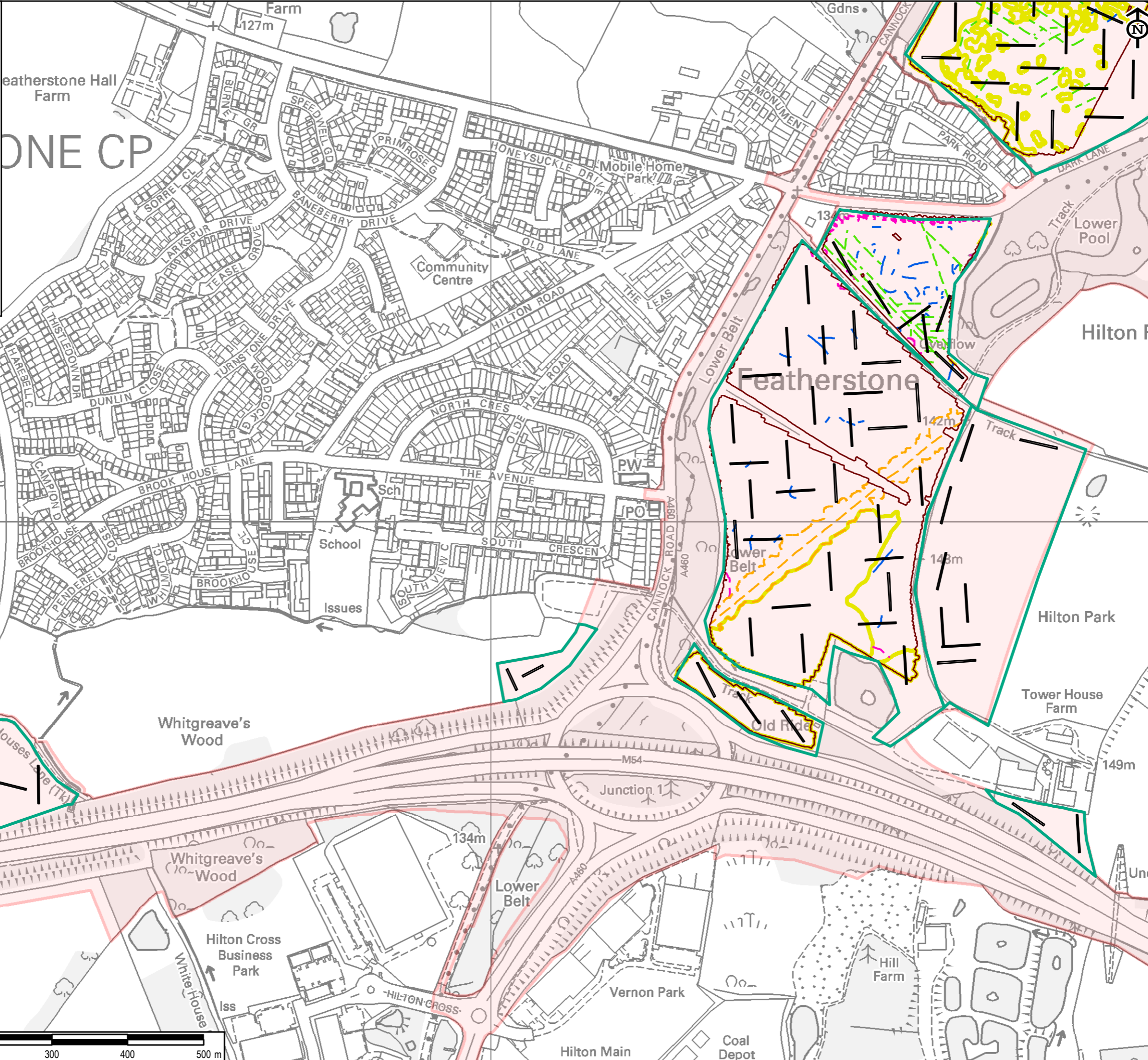
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LEGEND

- Scheme Boundary
- Trial Trench Location
- Trial Trench Area
- Archaeological Geophysical Survey
- Anomaly Type
 - Geophysical survey boundary
 - Bipolar Linear
 - Bipolar linear (showing linear response and extent of anomaly)
 - Area of very strong dipolar/bipolar responses (Magnetic Disturbance)
 - Linear/Curvi-linear trend (Weak or diffuse response)
 - Limit of very strong response



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Trench orientation amended	LC	FL	11/1/20	P02
First Issue	LC	FL	26/1/20	P01
Revision Details	By	Check	Date	Suffix

Purpose of issue
INTERNAL USE

Client: Highways England
Working on behalf of
highways england

Development Consent Order Number: TR010054

Project Title: M54 TO M6 LINK ROAD

Drawing Title: DRAFT TRIAL TRENCHES WITH ARCHAEOLOGICAL GEOPHYSICAL SURVEY - SHEET 3 OF 3

Designed LC	Drawn LC	Checked FL	Approved HM	Date
				11/12/2020

Internal Project No: 60624053
Suitability: S8

Scale @ A3: 1:5,000
Zone: M54 to M6 Link Road

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Drawing Number: HE514465 -BAM -EHR -
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Location: | Volume: | Originator: | Role: | Number: | Rev: P02

Plot Date: 11 December 2020 15:52:33
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