Northamptonshire Archaeology

Archaeological trial trench evaluation in advance of the proposed realignment of the B3193 near Kingsteignton, Devon

April 2010

Northamptonshire Archaeology
2 Bolton House
Wootton Hall Park
Northampton NN4 8BE
t. 01604 700493 f. 01604 702822
e. sparry@northamptonshire.gov.uk
w. www.northantsarchaeology.co.uk

Northamptonshire County Council

Jim Burke & Ian Meadows

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REGISTERED ORGANISATION IfA

STAFF

Project Manager	Ian Meadows BA
Fieldwork	Jim Burke and Lazlo Lichtenstein MA
Text	Jim Burke and Ian Meadows
Illustrations	Amir Bassir BSc

QUALITY CONTROL

	Print name	Signature	Date
Checked by	Pat Chapman		16/06/10
Verified by	Andy Chapman		16/06/10
Approved by	Steve Parry		

OASIS REPORT FORM OASIS ID: 78502

PROJECT DETAILS		
Project name	Archaeological Trial Trench Evaluation in Advance of the Proposed Realignment of the B3193, near Kingsteignton, Devon	
Short description	Northamptonshire Archaeology was commissioned by Andrew Josephs Ltd, on behalf of Sibelco UK, to conduct an archaeological trial trench evaluation of the route of the proposed B3193 realignment near Kingsteignton, Devon. Seven trenches were laid out within three areas along the route, one small area of arable land was unsuitable for evaluation due to badger setts, and the trenches were relocated 30m away from the setts. No archaeological features were detected in any of the areas.	
Project type	Trial Trench Evaluation.	
Site status	None	
Previous work	DBAs (Exeter Archaeology 2001 and 2007, Breen 2009) Geophysical Survey (Northamptonshire Archaeology, Walford 2009)	
Current Land use	Arable, Woodland and Copse	
Future work	Unknown	
Monument type/ period	None	
Significant finds	None	
PROJECT LOCATION		
County	Devon	
Site address	John Acres Lane, near Kingsteignton	
Study area	*c* 2.9 ha	
OS Easting & Northing	SX 865 755; SX 845 762	
Height OD	*c* 10-30m AOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	Andrew Josephs Ltd	
Project Design originator	Northamptonshire Archaeology	
Director/Supervisor	Jim Burke	
Project Manager	Ian Meadows	
Sponsor or funding body	Sibelco UK	
PROJECT DATE		
Start date	6 April 2010	
End date	9 April 2010	
ARCHIVES	Location Accession no.428/2009	Content
Physical		
Paper		
Digital		
BIBLIOGRAPHY	Unpublished client report (NA report)	
Title	Archaeological Trial Trench Evaluation in Advance of the Proposed Re-alignment of the B3193, near Kingsteignton, Devon	
Serial title & volume	NA Reports 10/95	
Author(s)	Jim Burke and Ian Meadows	
Date	September 2010	

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ARCHAEOLOGICAL TRIAL TRENCH EVALUATION IN ADVANCE OF THE PROPOSED REALIGNMENT OF THE B3193 NEAR KINGSTEIGNTON, DEVON

APRIL 2010

ABSTRACT

Northamptonshire Archaeology was commissioned by Andrew Josephs Ltd, on behalf of Sibelco UK, to conduct an archaeological trial trench evaluation of the route of the proposed B3193 realignment near Kingsteignton, Devon. Seven trenches were located along the route following a geophysical survey. No features of archaeological significance were detected in any of these trenches.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by Andrew Josephs Ltd, on behalf of Sibelco UK, to conduct an archaeological trial trench evaluation of the route of the proposed B3193 re-alignment near Kingsteignton, Devon (Fig 1). The scheme of works followed a brief issued by Devon County Council Historic Environment Service (DCCHES) (Rance 2009) and was preceded by a geophysical survey (Walford 2009). This produced no clear archaeological anomalies in the areas that were surveyed. However, the trenches were positioned, after discussion with Helen Rance (DCCHES), to investigate a possible field boundary and some weak anomalies that could indicate potential archaeology (Fig 2). It is proposed that a length of the current road will be closed where it passes between Southacre and Whitepit quarries and that a replacement will be built around the eastern edge of the quarry area.

Acknowledgements
We would like to acknowledge the help received for this project from Sibelco Ltd, Andrew Josephs Ltd and Helen Rance (DCCHES).

2 TOPOGRAPHY AND GEOLOGY

The proposed realignment runs through the eastern side of the Teign valley. The immediately surrounding terrain is wooded with arable and pasture land along the route of the proposed road (Fig 2).

Field 1 is a long and narrow arable field centred on SX 864 756 and lying at an elevation of *c* 30m AOD. Field 2 is also an arable field, centred on SX 854 762 and lying at *c* 13m AOD. Field 3 is a pasture field that had been artificially terraced, centred on SX 866 749 and lying at *c* 10m AOD.

The local geology comprises sediments of the Oligocene that accumulated within a deeply subsided fault zone. This feature, known as the Bovey Basin, is an important source of lignite and ball clay and has been very extensively quarried. The local landscape is thus dominated by opencast workings and associated tips and bunds (Exeter Archaeology 2001).

3 ARCHAEOLOGICAL BACKGROUND

The archaeology of the Bovey Basin mineral extraction area has been the subject of two desk-based assessments and an historical map search (Exeter Archaeology 2001 & 2007, Breen 2009). A further review of the Devon Historic Environment Record (HER) data was undertaken by NA staff on 4 November 2009. These studies did not identify any significant archaeological remains within the re-alignment corridor but did note a few sites within the wider area. These include a flint scatter at SX 845 757, a probable round barrow at SX 850 764 and a Romano-British enclosure at SX 844 755. Whilst not directly relevant to the present fieldwork, such sites demonstrate the potential for further ancient remains to be encountered.

During the course of an arboricultural survey of the realignment corridor (Nicholas Pearson Associates 2009, figs 5.1-5.4), earthworks were noticed in John Acres Copse and north of the sports pitch at Sandygate (Fig 2). These were subject to a rapid archaeological assessment as part of the present works, see below. Following a site visit by Helen Rance, Stephen Reed (Devon CC) and Andrew Josephs, it was agreed that a rapid earthwork survey would be undertaken to identify the extent and location of earthworks that appeared to be predominantly post-medieval extraction hollows and field boundaries.

4 METHODOLOGY

Seven trenches were opened along the proposed realignment of the B3193. Trench locations were positioned to intercept the possible weak archaeological anomalies that were identified during the geophysical survey. The trenches were set out using a Leica System 1200 GPS operating to a tolerance of +/- *c* 0.05m in relation to Ordnance Survey National Grid and Ordnance Datum.

All work was undertaken in accordance with the 1974 Health and Safety at Work etc Act and the welfare policies of Northamptonshire County Council. A full scan for buried services was conducted in the areas to be trenched prior to commencement of excavation using a CAT scan and this was also used during machine excavation. All seven trenches were secured preventing public access during excavation, and were backfilled as soon as possible.

Ground clearance and excavation was conducted using two mechanical excavators. In Fields 1 and 3 a 40 ton 360 was used fitted with a 2m wide toothless bucket and in Field 2 a mini digger fitted with a 1.8m wide toothless ditching bucket was used. Topsoil, subsoil and underlying layers were removed in stratigraphic sequence by machine under archaeological direction. Mechanical excavation stopped at the surface of the archaeological horizon or the natural substrate.

Fieldwork was conducted according to the Institute for Archaeologists' *Standard and Guidance for archaeological field evaluation* (IfA 2008) and *Code of Conduct* (IfA 2009). Recording followed standard NA guidelines (NA 2006). The area was cleaned and planned. All deposits were given separate context numbers and described on *pro-forma* trench and context sheets to include details of the deposit, its relationships and interpretation. This field data was compiled into a site archive with appropriate cross-referencing.

A photographic record was maintained, comprising 35mm black and white negatives and colour transparencies. A digital record was maintained as a supplement to the main archive.

The excavated area was surveyed using the Leica GPS and related to the Ordnance Survey Grid with spot heights for plans and sections recorded in relation to the height

above Ordnance Datum

5 EVALUATION RESULTS

5.1 Trench 1

The trench was aligned north-west to south-east, and was 27.7m long (Figs 3). The base of the trench was the natural (1003) sandy yellow-orange silty clay, 0.43m deep at the south-west and 0.54m deep at the north-east. The natural contained evenly distributed small flint nodules and pebbles, between 100mm and 280mm in diameter, incorporated with smaller gravels. In its upper surface traces of plough scars, probably of recent origin, were visible throughout the length of the trench. Also cut into it was a modern drain (Fig 4).

The natural clay (1003) was overlaid by a mixture of lower plough subsoil (1002) and upper plough soil (1001), only slight differences between the soils could be found. The lower plough soil comprised a mid-brown soil with moderate amount of small gravel, flint and stone, the upper plough soil a rich organic mid-brown with shattered flint fragments and stone throughout.

No archaeological or artefacts features were present.

5.2 Trench 2

This trench was aligned west-north-west to east-south-east, and was 33.5m long (Figs 3 & 4). At the base of the trench, 0.48m deep, was natural silty clay (2003), mottled grey-yellow in colour. At the south-eastern end of the trench, remains of tree boles and a modern drain were present, sealed by dark blackish, waterlogged, silty sandy clay (2004). This was overlaid by a lower plough soil (2002) and an upper plough soil (2001). Only slight differences between the soils could be found along the length of the trench, the lower plough soil comprised a light to mid-brown soil with moderate amount of small gravel and stone, the upper plough soil was a mid-brown with shattered flint fragments and stone throughout.

No archaeological features or artefacts were present.

5.3 Trench 3

Aligned north-west to south-east, this trench was 52.5m long (Fig 5 & 6). The natural orange-yellow silty sandy clay (3003) lay 0.97m deep at the north-western end of the trench and 0.55m deep from the middle to the south-eastern end of the trench. This was overlain at the northern end of the trench by a thin layer, 0.13m thick, of brown silty sandy clay (3005) that thinned out within the first 12m of the trench. Where (3005) was present, it was overlain by an orange mottled sandy clay (3004), which elsewhere directly overlay the natural (3003). Layer (3004) was 0.26m thick and contained occasional gravels evenly distributed. The lower plough soil, a mid to dark brown clay (3002) with the occasional small stone and gravel, was overlain by an upper plough soil of dark brown clay loam (3001) with occasional small stones and flints.

No archaeological features or artefacts were present.

5.4 Trench 4

The trench was aligned north-north-west to south-south-east, and was 50m long (Figs 6). The natural (4004), a series of clays comprising orange-yellow mixed boulder clay with

patches of orange sandy clay and natural bands of fine blue clay with reddish veined clay, lay at an average depth of 0.80m. This was sealed by a mixed sand and clay (4003) of reddish-brown colour and 0.22m thick. Extending for the whole length of the trench was a lower plough soil, a mid-brown clay loam (4002) with flint, gravel and small stones inclusions which merged with the upper plough soil, (4001), a slightly darker brown clay loam, with a scattering of flint, stone and gravel.

No archaeological features or artefacts were present.

5.5 Trench 5

Aligned north-north-west to south-south-east the trench was 57m long (Fig 6). The natural (5003), encountered at 0.70m deep, was a firm light grey and reddish-brown clay with limestone, mixed with sandy orange-yellow clay. The stones measured between 60mm and 150mm in diameter and were firmly compacted together in small areas. Patches of blue clay were also noted in the trench. The sharp contrast between the natural and subsoil was noted throughout the trench. The subsoil (5002) was light grey-brown silty clay; with occasional pebbles evenly distributed throughout. The topsoil (5001) was rich dark brown organic ploughed soil with flint and gravels and occasional larger limestone fragments.

No archaeological features or artefacts were present.

5.6 Trench 6

This trench could not be excavated where originally planned owing to the presence of a badger sett and runs, and also a soil bund which separated this field from the quarry track way. It was relocated after discussion with Andrew Josephs and DCCHES.

The trench was aligned north to south, and was 28m long (Fig 7 & 8). The natural (6003) comprised a silty orange sand with a mixture of ironstone, limestone, and clay, which occurred at 0.85m deep at the northern end and 1.20m deep at the southern end of the trench. This was sealed with a possible buried soil (6004) that was very similar to the natural. It was 0.48m thick at the northern end, deepening to 0.85m at the southern end of the trench. Within this layer were small flint nodules, fragmented limestone and orange sandy bands of clay. This was sealed by subsoil (6002) of silty grey clay, with evenly distubuted gravel and flint fragments. The topsoil (6001) comprised a rich mid-grey, silty, soil, with standing water.

No archaeological features or artefacts were present.

5.7 Trench 7

This trench also had to be repositioned owing to the presence of the soil bund. It was aligned north to south, and was 30m long (Fig 8). The natural (7003) was encountered at 1.0m. It comprised silty yellow clay at the northern end of the trench and its character gradually changed to a silty yellow-orange clay with large flint and pebbles. This was sealed by a thin greyish-brown silt layer (7004) with reddish-brown ironstone fragments. This was overlain by subsoil (7002) of light brownish-yellow sandy clay, with occasional pebbles. The topsoil (7001) comprised rich mid-grey, silty, marshy, organic soil. During the excavation of this trench water slowly percolated out of the section from just under the topsoil.

No archaeological features or artefacts were present.

6 OBSERVATION OF EARTHWORK REMAINS

Northamptonshire Archaeology staff undertook a survey of earthworks 9 April 2010. These lay predominantly in John Acres Copse (Fig 9) and appeared to comprise a series of earth-

cut features, some with localised slight banks presumably from their original upcast. Features include a dry pond, possible small quarry scrapes and several slight woodland bank-type features of no great antiquity, some of which could be seen to continue current land boundaries. It has been suggested that some of the earthworks, such as the pond and many of the ditches, may form groups of features associated with water management, perhaps associated with watering grazing cattle or to assist in the drainage of an area, which was inherently wet.

7 CONCLUSION

No archaeological features were found within the excavated trenches and no artefacts were recovered even from topsoil/plough soil layers. Therefore any past human activity in this area was probably not of any great intensity and was probably related mainly to woodland management and grazing.

BIBLIOGRAPHY

Breen, M, 2009 *Re-alignment of the B3193 at Kingsteignton, Devon: Documentary Report and Map Search*, unpublished

Exeter Archaeology 2001 *Archaeological Assessment of Bovey Basin Mineral Site: Part 1,* Exeter Archaeology, **01.180**

Exeter Archaeology 2007 *Archaeological Assessment of Southacre and John Acres Lane / Whitepit Operational Areas*, Exeter Archaeology, **07.37**

IfA 2008 *Standard and Guidance for archaeological field evaluation,* Institute for Archaeologists

IfA 2009 *Code of Conduct,* Institute for Archaeologists

Nicholas Pearson Associates 2009 *Arboricultural Survey and Asessment Report for B3193 – Whitepit Extension, Kingsteignton, Newton Abbot*, unpublished

NA 2006 *Archaeological Fieldwork Manual,* Northamptonshire Archaeology

Rance, H, 2009 *Brief for archaeological evaluation and geophysical survey: proposed re-alignment of the B3193 Chudleigh Road at Kingsteignton, Newton Abbot, Devon,* Devon County Council Historic Environment Services

Walford, J, 2009 *Archaeological geophysical survey in advance of the proposed re-alignment of the B3193 near Kingsteignton, Devon. November 2009*, Northamptonshire Archaeology Report, **09/182**

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APPENDIX

BRIEF FOR ARCHAEOLOGICAL EVALUATION & GEOPHYSICAL SURVEY

Location: **B3193 Chudleigh Road**
Parish: **Kingsteignton**
District: **Teignbridge**
County: **Devon**
NGR: **286626.074746**

Planning Application no: **n/a**

Proposal: **Proposed re-alignment of the B3193 Chudleigh Road at Kingsteignton, Newton Abbot, Devon**

Historic Environment Service ref: **Arch/cm/te/14906**

1. INTRODUCTION AND ARCHAEOLOGICAL BACKGROUND

1.1 This brief has been prepared by the Devon County Council Historic Environment Service (HES), at the request of Andrew Josephs, of Andrew Josephs Ltd, with regard to the archaeological works required in support of any future planning application for the proposed re-alignment of the B3193.

1.2 The route of the proposed realignment of the B3193 runs adjacent to and to the north and east of the extant quarry, south from John Acres Lane it crosses land that has not been disturbed by past quarry activity, and in an area of archaeological potential. The HER notes the presence of prehistoric and Roman activity in the surrounding landscape, as well as later activity associated with the early clay workings, a water mill and the possible site of a kiln at the southern end of the proposed route.

In accordance with National, County and Local Policy, the HES has recommended that any planning application submitted is supported by a programme of archaeological investigation. The results of these investigations would allow the impact of the proposed development to be determined and this office to provide advice to the Planning Authority to make an informed and reasonable planning decision.

1.3 The principal objective of the programme shall be to evaluate the survival of below-ground archaeological deposits across the proposed development site. The results will inform as to the nature, extent, and date of any surviving archaeological deposits within the potential application area. This information will inform as to the requirement for any further investigations to be undertaken as mitigation for the impact of the proposed development upon the archaeological resource and, as such, represents the first stage of a programme of archaeological mitigation.

1.4 This Brief covers the potential application area as defined in the plans provided by Sibelco UK Ltd (DO2/P04/001 and DO2/P04/002).

2. METHOD STATEMENT

2.1 This document sets out the scope of the works required to record the extent and character of any surviving archaeological deposits within the application area and will form the basis of the Method Statement prepared by the archaeological consultant and approved by the HES.

3. CONTENT OF PROGRAMME

3.1 Desk-based assessment
The programme of work shall include a desk-based appraisal of the site to place the development

area into its historic and archaeological context. This work will consist of map regression based on the Ordnance Survey maps and the Tithe Map(s) and Apportionments. An examination will also be made of records and aerial photographs held by the HER. The reporting requirements for the desk-based work will be confirmed in consultation with the HES.

The results of the assessment should be discussed with the HES and based on this consultation may determine the positioning of the evaluative excavations.

This information will be presented as part of the final report along with the results of the fieldwork.

3.2 Geophysical survey

A geophysical survey shall be undertaken of the proposed development site. The geophysical survey technique utilised shall be appropriate to the topographic and soil conditions of the site. The proposed geophysical methodology will be set out in the Method Statement and will conform to the English Heritage guidelines in the publication Geophysical Survey in Archaeological Field Evaluation (2008). The Method Statement should outline the suitability of areas within the proposed development site for geophysical survey, and this should be accompanied by an illustrative plan. If certain areas are deemed unsuitable for geophysical survey, description of the proposed mitigation strategy should also be included within the Method Statement.

3.3 Evaluation of the site

A series of trenches will be excavated across the proposed development area. The location of these excavations will be determined in consideration of the results of the desk-based assessment, the below-ground impact of the proposed development, the site topography and the vegetation cover. These excavations should investigate 3% of the area affected by the proposed development and to investigate any anomalies identified by the geophysical survey. The percentage sample may be increased to a 5% total sample if the geophysical survey is ineffective or site conditions render the survey inoperable.

3.3.1 Details of the strategy for positioning trenches must be agreed with the HES. Trenches should be excavated by a 360° tracked or JCB-type machine - fitted with a toothless grading bucket - to the surface of archaeological deposits or in situ natural ground - whichever is highest in the stratigraphic sequence. Exposed archaeological features and deposits will be cleaned and excavated by hand and fully recorded by context as per the Institute for Archaeologists' Standard and Guidance for Archaeological Field Evaluation (1994 - revised 2008). All features shall be recorded in plan and section at scales of 1:10, 1:20 or 1:50. All scale drawing shall be drawn at a scale appropriate to the complexity of the deposit/feature and to allow accurate depiction and interpretation.

3.3.2 All archaeological features should be investigated and as a minimum:

i) small discrete features will be fully excavated;
ii) larger discrete features will be half-sectioned (50% excavated); and
iii) long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features.
iv) one long face of each trench will be cleaned by hand to allow the site stratigraphy to be understood and for the identification of archaeological features.

Should the above percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts

Any variation of the above will be undertaken in agreement with the HES.

3.3.3 The full depth of archaeological deposits must be assessed. This need not require excavation to natural deposits if it is clear that complex and deep stratigraphy will be encountered.

3.3.4 Should deposits be exposed that contain palaeoenvironmental or datable elements

appropriate sampling and post-excavation analysis strategies will be initiated. The project will be organised so that specialist consultants who might be required to conserve or report on finds or advise or report on other aspects of the investigation (e.g. palaeoenvironmental analysis) can be called upon and undertake assessment and analysis of such deposits - if required.

3.3.5 The photographic record shall be made in B/W print supplemented by digital or colour transparency. If digital imagery is to be the sole photographic record then suitably archivable prints must be made of the digital images by a photographic laboratory. Laser or inkjet prints of digital images, while acceptable for inclusion in the report, are not an acceptable medium for archives. The drawn and written record will be on an appropriately archivable medium.

3.3.6 Human remains must initially be left in-situ, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation.

3.3.7 Any finds identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, must be dealt with according to the Treasure Act 1996 Code of Practice (2nd Revision) (Dept for Culture Media and Sport). Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

4. MONITORING

4.1 The archaeological consultant shall agree monitoring arrangements with the County Historic Environment Service and give two weeks notice, unless a shorter period is agreed with the HES, of commencement of the fieldwork. Details will be agreed of any monitoring points where decisions on options within the programme are to be made.

4.2 Monitoring will continue until the deposition of the site archive and finds, and the satisfactory completion of an OASIS report - see 5.4 below.

5. REPORTING

5.1 Upon completion of this stage of fieldwork and the geophysical survey, a report will be produced detailing the results of these investigations. The report will collate the written, graphic, visible and recorded information outlined above. The report shall include plans and reports of all documentary and other research, and of the trenches, features, deposits and artefacts together with their interpretation. The report will also include an overall plan showing the boundaries of the site, the location of the evaluative trenches and any other areas subject to archaeological investigation in relation to those boundaries and all exposed archaeological features and deposits. It is recommended that a draft report is submitted to the HES for comment.

If subsequent archaeological mitigation work is undertaken the results of both stages of work (evaluation and mitigation) will be presented in a full, illustrated report.

In both cases the report shall demonstrate the archaeological potential of the site and the impact upon it of the proposed development. The report may in appropriate cases make suggestions as to appropriate mitigation of the archaeological impact of the proposal, but these will be subject to review by the HES.

5.2 The HES would normally expect to receive the report within three months of completion of fieldwork - dependant upon the provision of specialist reports, radiocarbon dating results etc the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced. A copy of this brief shall be included in the report.

5.3 On completion of the report, in addition to copies required by the Client, hard copies of the report shall be supplied to the HES on the understanding that one of these copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy shall be provided to the County Historic Environment Service in digital format - in a format to be agreed in advance with the HES - on the understanding that it may in future be made available to researchers

via a web-based version of the Historic Environment Record.

5.4 The archaeological consultant shall complete an online OASIS (Online AccesS to the Index of archaeological investigationS) form in respect of the archaeological work. This will include a digital version of the report. **The report or short entry to the Historic Environment Record will also include the OASIS ID number.**

5.5 Publication
Should particularly significant remains, finds and/or deposits be encountered, then these, because of their importance, are likely to merit wider publication in line with government planning guidance. If such remains are encountered, the publication requirements – including any further analysis that may be necessary – will be confirmed with the HES. If further archaeological works are undertaken, then the results of these initial evaluative investigations will be incorporated into the publication text resulting from further works.

6. FURTHER WORK

In the light of the results of the archaeological evaluation it will be possible to determine the nature and significance of any surviving archaeological remains - if any.

If significant and important archaeological remains are exposed the HES may recommend refusal of a future planning application on the basis that the loss of such remains would be unacceptable. If the loss surviving archaeological remains was 'acceptable' then the HES may recommend the imposition of a PPG16 Condition upon any future consent granted for development that would require additional archaeological works to allow 'preservation by record' of any archaeological remains affected by the proposed development. This work would be undertaken as mitigation for the impact of the proposed development on the archaeological resource. The scope of any further work required will be set out in a Written Scheme of Investigation (WSI) - to be prepared by the applicant's archaeological consultant - and approved by the HES and the LPA in advance of implementation.

Should the site be demonstrated to be archaeologically sterile then there would be no requirement for further archaeological works.

7. PERSONNEL

7.1 The work shall be carried out by a recognised archaeological consultant, agreed with the DCHES. Staff must be suitably qualified and experienced for their project roles. All work should be carried out under the control of a specified Member of the Institute for Archaeologists (MIFA), or by a specified person of equivalent standing and expertise. The Method Statement will contain details of key project staff and specialists who may contribute during the course of the works - excavation and post-excavation.

7.2 Health and Safety matters, including site security, are matters for the consultant. However, adherence to all relevant regulations will be required.

7.3 The work shall be carried out in accordance with IFA Standard and Guidance for Archaeological Field Evaluation (1994), as amended (2008).

8. DEPOSITION OF ARCHIVE AND FINDS

8.1 The archaeological consultant shall contact the museum that will receive the site archive to obtain an accession number and agree conditions for deposition. The accession number will be quoted in the Method Statement.

8.2 The artefact discard policy must be set out in the Method Statement.

8.3 Archaeological finds resulting from the investigation (which are the property of the landowner), should be deposited with the appropriate museum - in a format to be agreed with the museum, and within a timetable to be agreed with the HES. The museum's guidelines for the

deposition of archives for long-term storage should be adhered to. If ownership of all or any of the finds is to remain with the landowner, provision and agreement must be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.

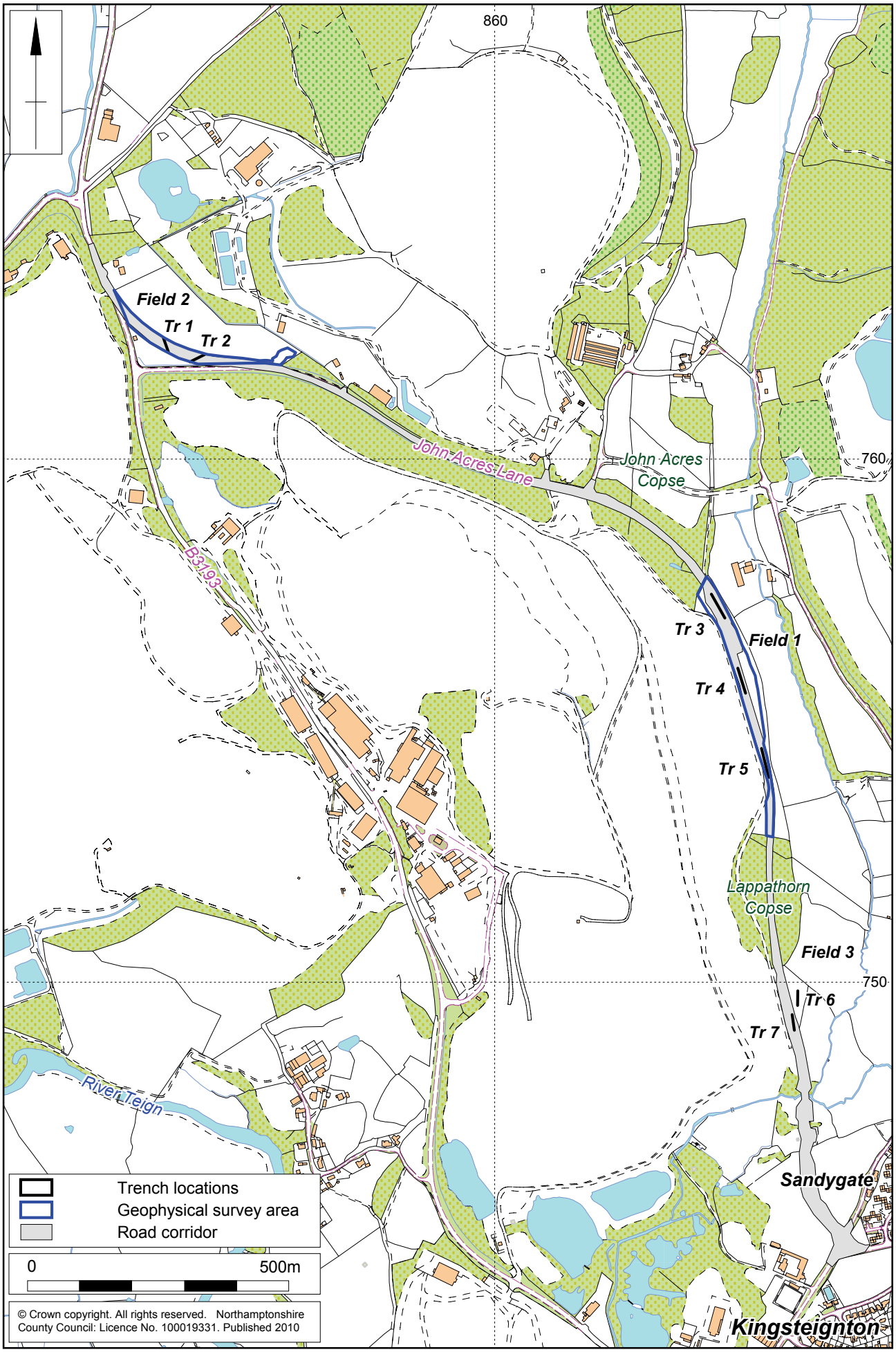
9. CONTACT NAME AND ADDRESS

Helen Rance, Archaeological Officer, Devon County Council, Environment, Economy and Culture Directorate, Matford Offices, County Hall, Exeter EX2 4QW
Tel: 01392-381223 Fax: 01392-383011 E-mail: helen.rance@devon.gov.uk

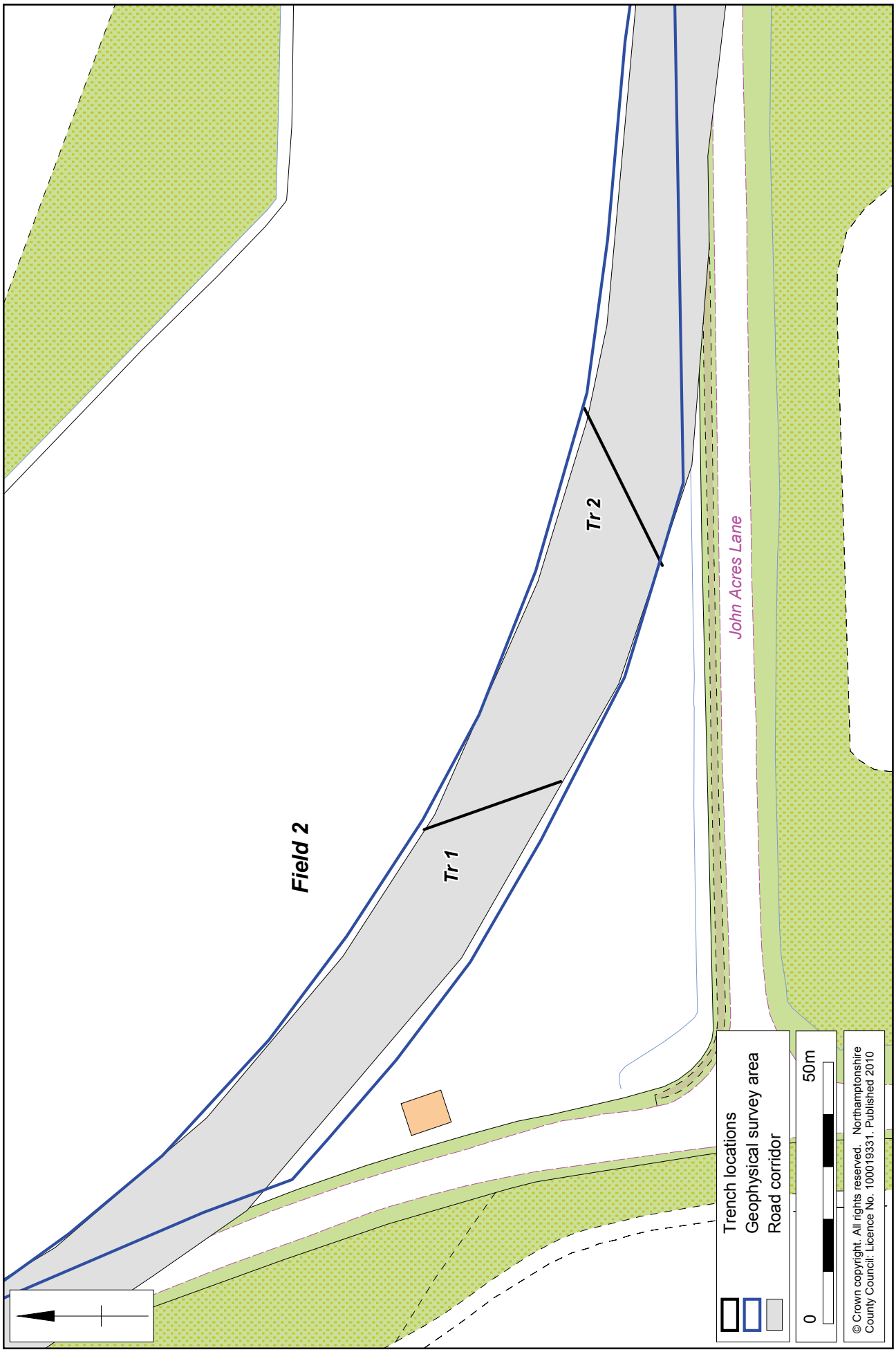
13/09/10

Scale 1:15,000

Site Location Fig 1



Scale 1:10,000 Proposed realignment of the B3193 showing trench locations Fig 2

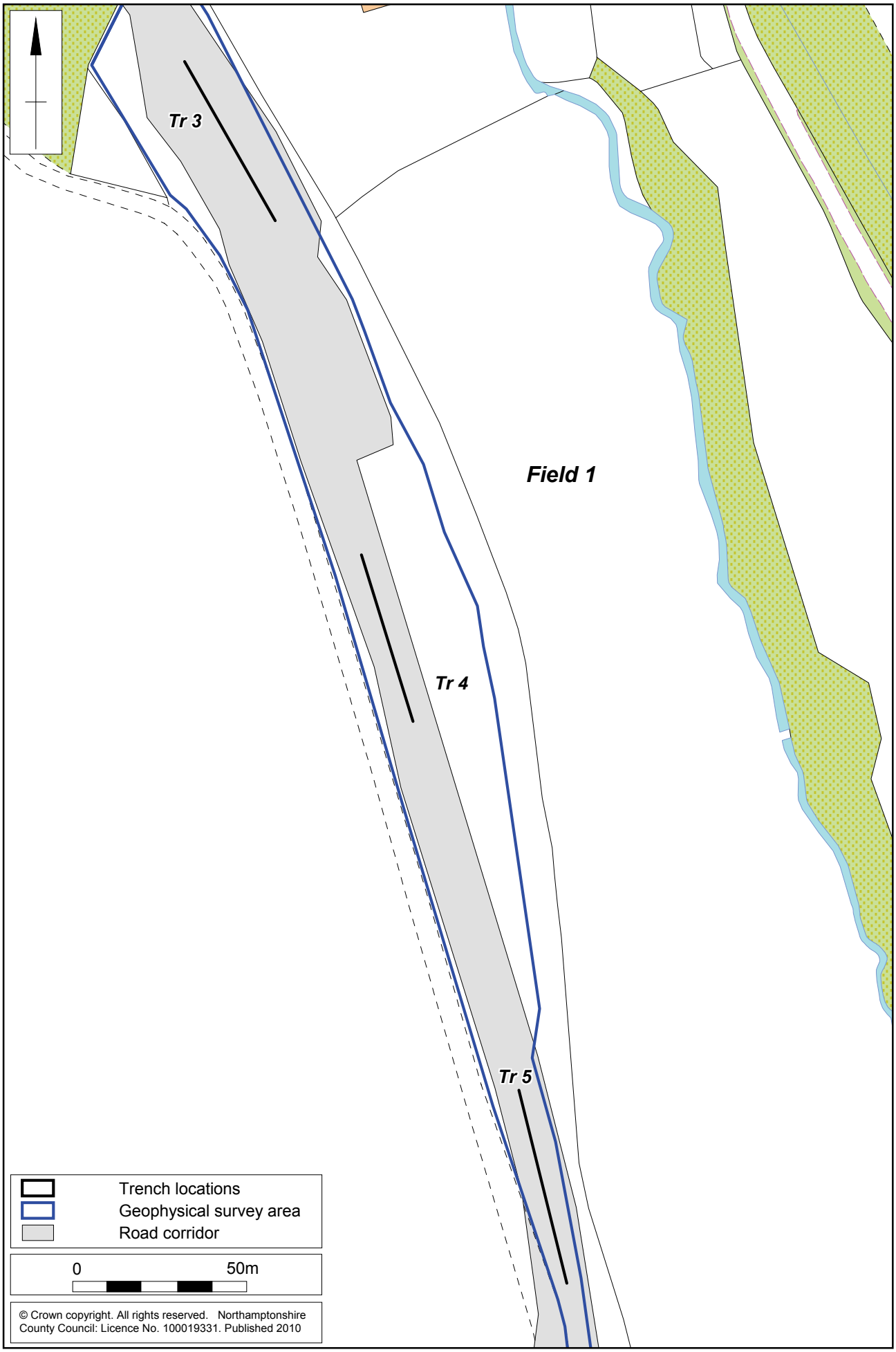


Scale 1:1000

Field 2 showing location of Trenches 1 and 2 Fig 3

General view of Trench 2, looking south-east Fig 4

General view of Trench 3, looking north-west Fig 5



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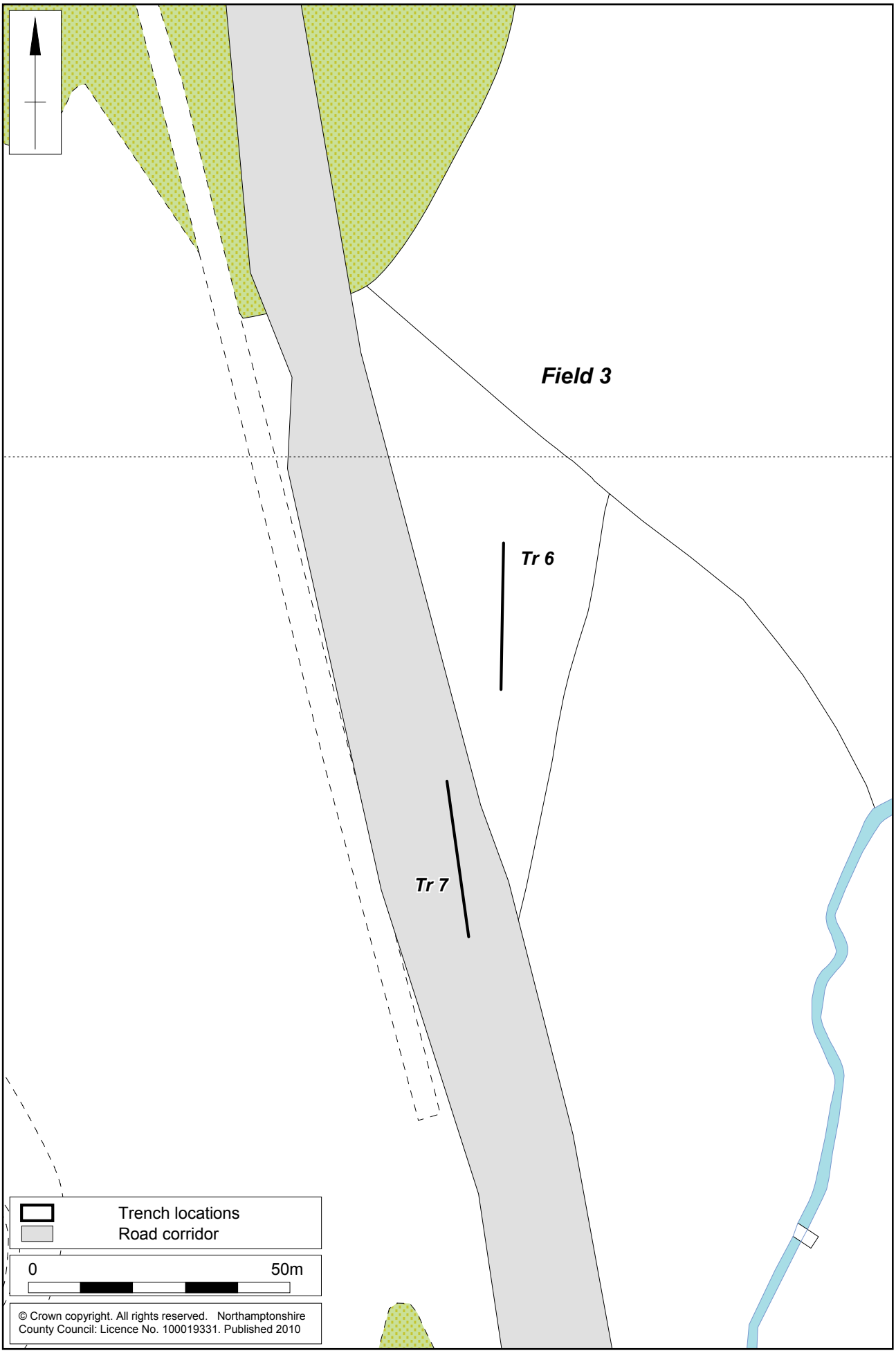
Field 1 showing location of Trenches 3, 4 and 5 Fig 6

General view of Trench 6, looking south Fig 7



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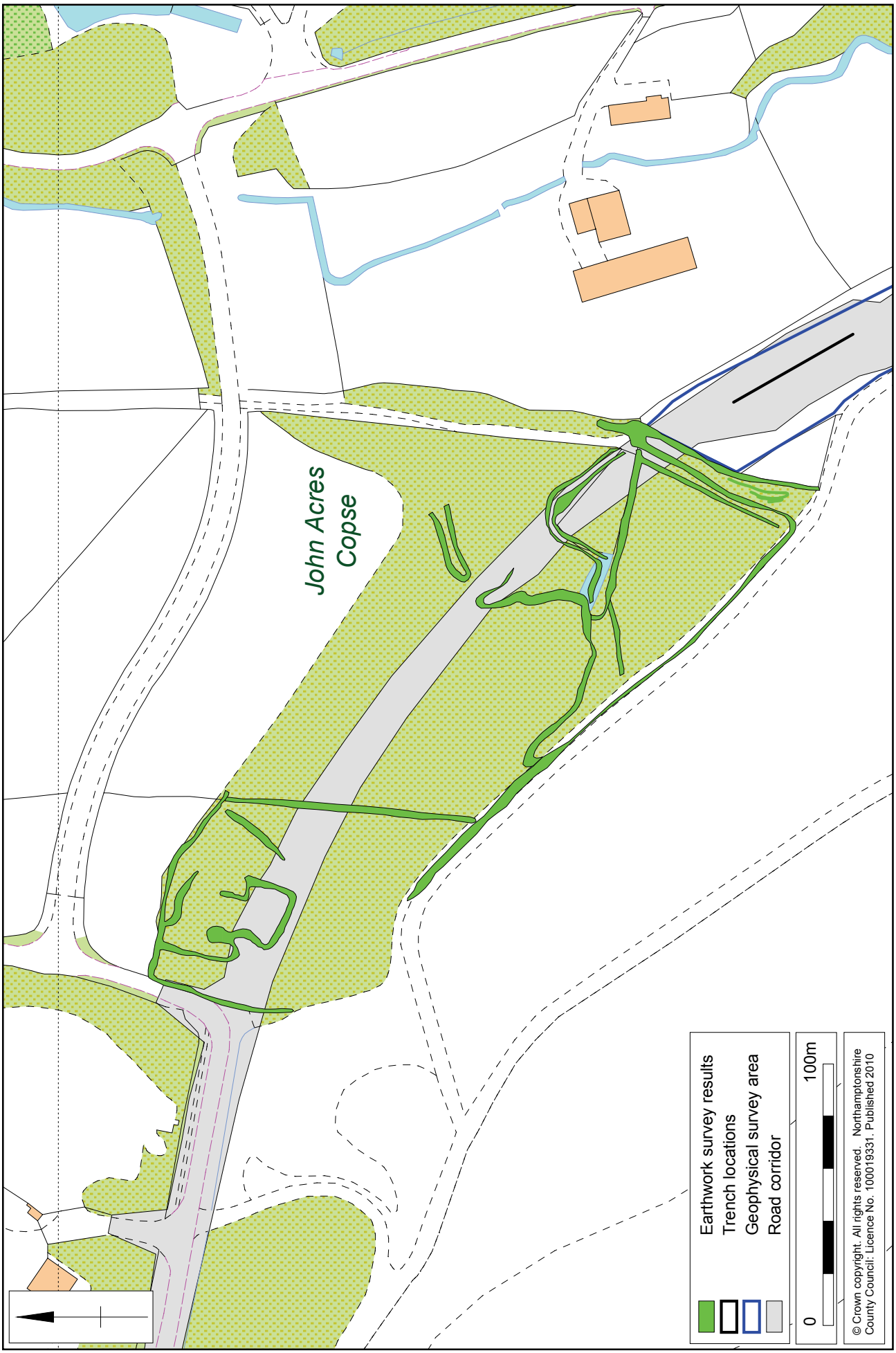
Field 3 showing location of Trenches 6 and 7 Fig 8



Scale 1:2000

Earthwork Survey at Fosterville Copse Fig 9

APPENDIX

BRIEF FOR ARCHAEOLOGICAL EVALUATION & GEOPHYSICAL SURVEY

Location: **B3193 Chudleigh Road**
Parish: **Kingsteignton**
District: **Teignbridge**
County: **Devon**
NGR: **286626.074746**

Planning Application no: **n/a**

Proposal: **Proposed re-alignment of the B3193 Chudleigh Road at Kingsteignton, Newton Abbot, Devon**

Historic Environment Service ref: **Arch/cm/te/14906**

1. INTRODUCTION AND ARCHAEOLOGICAL BACKGROUND

1.1 This brief has been prepared by the Devon County Council Historic Environment Service (HES), at the request of Andrew Josephs, of Andrew Josephs Ltd, with regard to the archaeological works required in support of any future planning application for the proposed re-alignment of the B3193.

1.2 The route of the proposed realignment of the B3193 runs adjacent to and to the north and east of the extant quarry, south from John Acres Lane it crosses land that has not been disturbed by past quarry activity, and in an area of archaeological potential. The HER notes the presence of prehistoric and Roman activity in the surrounding landscape, as well as later activity associated with the early clay workings, a water mill and the possible site of a kiln at the southern end of the proposed route.

In accordance with National, County and Local Policy, the HES has recommended that any planning application submitted is supported by a programme of archaeological investigation. The results of these investigations would allow the impact of the proposed development to be determined and this office to provide advice to the Planning Authority to make an informed and reasonable planning decision.

1.3 The principal objective of the programme shall be to evaluate the survival of below-ground archaeological deposits across the proposed development site. The results will inform as to the nature, extent, and date of any surviving archaeological deposits within the potential application area. This information will inform as to the requirement for any further investigations to be undertaken as mitigation for the impact of the proposed development upon the archaeological resource and, as such, represents the first stage of a programme of archaeological mitigation.

1.4 This Brief covers the potential application area as defined in the plans provided by Sibelco UK Ltd (DO2/P04/001 and DO2/P04/002).

2. METHOD STATEMENT

2.1 This document sets out the scope of the works required to record the extent and character of any surviving archaeological deposits within the application area and will form the basis of the Method Statement prepared by the archaeological consultant and approved by the HES.

3. CONTENT OF PROGRAMME

3.1 Desk-based assessment
The programme of work shall include a desk-based appraisal of the site to place the development

area into its historic and archaeological context. This work will consist of map regression based on the Ordnance Survey maps and the Tithe Map(s) and Apportionments. An examination will also be made of records and aerial photographs held by the HER. The reporting requirements for the desk-based work will be confirmed in consultation with the HES.

The results of the assessment should be discussed with the HES and based on this consultation may determine the positioning of the evaluative excavations.

This information will be presented as part of the final report along with the results of the fieldwork.

3.2 Geophysical survey

A geophysical survey shall be undertaken of the proposed development site. The geophysical survey technique utilised shall be appropriate to the topographic and soil conditions of the site. The proposed geophysical methodology will be set out in the Method Statement and will conform to the English Heritage guidelines in the publication Geophysical Survey in Archaeological Field Evaluation (2008). The Method Statement should outline the suitability of areas within the proposed development site for geophysical survey, and this should be accompanied by an illustrative plan. If certain areas are deemed unsuitable for geophysical survey, description of the proposed mitigation strategy should also be included within the Method Statement.

3.3 Evaluation of the site

A series of trenches will be excavated across the proposed development area. The location of these excavations will be determined in consideration of the results of the desk-based assessment, the below-ground impact of the proposed development, the site topography and the vegetation cover. These excavations should investigate 3% of the area affected by the proposed development and to investigate any anomalies identified by the geophysical survey. The percentage sample may be increased to a 5% total sample if the geophysical survey is ineffective or site conditions render the survey inoperable.

3.3.1 Details of the strategy for positioning trenches must be agreed with the HES. Trenches should be excavated by a 360° tracked or JCB-type machine - fitted with a toothless grading bucket - to the surface of archaeological deposits or in situ natural ground - whichever is highest in the stratigraphic sequence. Exposed archaeological features and deposits will be cleaned and excavated by hand and fully recorded by context as per the Institute for Archaeologists' Standard and Guidance for Archaeological Field Evaluation (1994 - revised 2008). All features shall be recorded in plan and section at scales of 1:10, 1:20 or 1:50. All scale drawing shall be drawn at a scale appropriate to the complexity of the deposit/feature and to allow accurate depiction and interpretation.

3.3.2 All archaeological features should be investigated and as a minimum:

i) small discrete features will be fully excavated;
ii) larger discrete features will be half-sectioned (50% excavated); and
iii) long linear features will be sample excavated along their length - with investigative excavations distributed along the exposed length of any such feature and to investigate terminals, junctions and relationships with other features.
iv) one long face of each trench will be cleaned by hand to allow the site stratigraphy to be understood and for the identification of archaeological features.

Should the above percentage excavation not yield sufficient information to allow the form and function of archaeological features/deposits to be determined full excavation of such features/deposits will be required. Additional excavation may also be required for the taking of palaeoenvironmental samples and recovery of artefacts

Any variation of the above will be undertaken in agreement with the HES.

3.3.3 The full depth of archaeological deposits must be assessed. This need not require excavation to natural deposits if it is clear that complex and deep stratigraphy will be encountered.

3.3.4 Should deposits be exposed that contain palaeoenvironmental or datable elements

appropriate sampling and post-excavation analysis strategies will be initiated. The project will be organised so that specialist consultants who might be required to conserve or report on finds or advise or report on other aspects of the investigation (e.g. palaeoenvironmental analysis) can be called upon and undertake assessment and analysis of such deposits - if required.

3.3.5 The photographic record shall be made in B/W print supplemented by digital or colour transparency. If digital imagery is to be the sole photographic record then suitably archivable prints must be made of the digital images by a photographic laboratory. Laser or inkjet prints of digital images, while acceptable for inclusion in the report, are not an acceptable medium for archives. The drawn and written record will be on an appropriately archivable medium.

3.3.6 Human remains must initially be left in-situ, covered and protected. Removal can only take place under appropriate Ministry of Justice and environmental health regulations. Such removal must be in compliance with the relevant primary legislation.

3.3.7 Any finds identified as treasure or potential treasure, including precious metals, groups of coins or prehistoric metalwork, must be dealt with according to the Treasure Act 1996 Code of Practice (2nd Revision) (Dept for Culture Media and Sport). Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

4. MONITORING

4.1 The archaeological consultant shall agree monitoring arrangements with the County Historic Environment Service and give two weeks notice, unless a shorter period is agreed with the HES, of commencement of the fieldwork. Details will be agreed of any monitoring points where decisions on options within the programme are to be made.

4.2 Monitoring will continue until the deposition of the site archive and finds, and the satisfactory completion of an OASIS report - see 5.4 below.

5. REPORTING

5.1 Upon completion of this stage of fieldwork and the geophysical survey, a report will be produced detailing the results of these investigations. The report will collate the written, graphic, visible and recorded information outlined above. The report shall include plans and reports of all documentary and other research, and of the trenches, features, deposits and artefacts together with their interpretation. The report will also include an overall plan showing the boundaries of the site, the location of the evaluative trenches and any other areas subject to archaeological investigation in relation to those boundaries and all exposed archaeological features and deposits. It is recommended that a draft report is submitted to the HES for comment.

If subsequent archaeological mitigation work is undertaken the results of both stages of work (evaluation and mitigation) will be presented in a full, illustrated report.

In both cases the report shall demonstrate the archaeological potential of the site and the impact upon it of the proposed development. The report may in appropriate cases make suggestions as to appropriate mitigation of the archaeological impact of the proposal, but these will be subject to review by the HES.

5.2 The HES would normally expect to receive the report within three months of completion of fieldwork - dependant upon the provision of specialist reports, radiocarbon dating results etc the production of which may exceed this period. If a substantial delay is anticipated then an interim report will be produced. A copy of this brief shall be included in the report.

5.3 On completion of the report, in addition to copies required by the Client, hard copies of the report shall be supplied to the HES on the understanding that one of these copies will be deposited for public reference in the HER. In addition to the hard copies of the report, one copy shall be provided to the County Historic Environment Service in digital format - in a format to be agreed in advance with the HES - on the understanding that it may in future be made available to researchers

via a web-based version of the Historic Environment Record.

5.4 The archaeological consultant shall complete an online OASIS (Online AccesS to the Index of archaeological investigationS) form in respect of the archaeological work. This will include a digital version of the report. **The report or short entry to the Historic Environment Record will also include the OASIS ID number.**

5.5 Publication
Should particularly significant remains, finds and/or deposits be encountered, then these, because of their importance, are likely to merit wider publication in line with government planning guidance. If such remains are encountered, the publication requirements – including any further analysis that may be necessary – will be confirmed with the HES. If further archaeological works are undertaken, then the results of these initial evaluative investigations will be incorporated into the publication text resulting from further works.

6. FURTHER WORK

In the light of the results of the archaeological evaluation it will be possible to determine the nature and significance of any surviving archaeological remains - if any.

If significant and important archaeological remains are exposed the HES may recommend refusal of a future planning application on the basis that the loss of such remains would be unacceptable. If the loss surviving archaeological remains was 'acceptable' then the HES may recommend the imposition of a PPG16 Condition upon any future consent granted for development that would require additional archaeological works to allow 'preservation by record' of any archaeological remains affected by the proposed development. This work would be undertaken as mitigation for the impact of the proposed development on the archaeological resource. The scope of any further work required will be set out in a Written Scheme of Investigation (WSI) - to be prepared by the applicant's archaeological consultant - and approved by the HES and the LPA in advance of implementation.

Should the site be demonstrated to be archaeologically sterile then there would be no requirement for further archaeological works.

7. PERSONNEL

7.1 The work shall be carried out by a recognised archaeological consultant, agreed with the DCHES. Staff must be suitably qualified and experienced for their project roles. All work should be carried out under the control of a specified Member of the Institute for Archaeologists (MIFA), or by a specified person of equivalent standing and expertise. The Method Statement will contain details of key project staff and specialists who may contribute during the course of the works - excavation and post-excavation.

7.2 Health and Safety matters, including site security, are matters for the consultant. However, adherence to all relevant regulations will be required.

7.3 The work shall be carried out in accordance with IFA Standard and Guidance for Archaeological Field Evaluation (1994), as amended (2008).

8. DEPOSITION OF ARCHIVE AND FINDS

8.1 The archaeological consultant shall contact the museum that will receive the site archive to obtain an accession number and agree conditions for deposition. The accession number will be quoted in the Method Statement.

8.2 The artefact discard policy must be set out in the Method Statement.

8.3 Archaeological finds resulting from the investigation (which are the property of the landowner), should be deposited with the appropriate museum - in a format to be agreed with the museum, and within a timetable to be agreed with the HES. The museum's guidelines for the

deposition of archives for long-term storage should be adhered to. If ownership of all or any of the finds is to remain with the landowner, provision and agreement must be made for the time-limited retention of the material and its full analysis and recording, by appropriate specialists.

9. CONTACT NAME AND ADDRESS

Helen Rance, Archaeological Officer, Devon County Council, Environment, Economy and Culture Directorate, Matford Offices, County Hall, Exeter EX2 4QW
Tel: 01392-381223 Fax: 01392-383011 E-mail: helen.rance@devon.gov.uk

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Northamptonshire County Council

Northamptonshire Archaeology

Northamptonshire Archaeology
2 Bolton House
Wootton Hall Park
Northampton NN4 8BE
t. 01604 700493 f. 01604 702822
e. sparry@northamptonshire.gov.uk
w. www.northantsarchaeology.co.uk

CHAS
CONTRACTORS HEALTH & SAFETY ASSESSMENT SCHEME
Accredited Contractor
www.chas.gov.uk

REGISTERED ORGANISATION IfA

Northamptonshire County Council