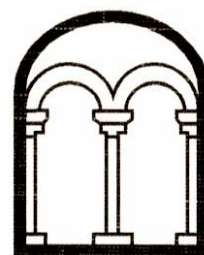


**A1 BIGGLESWADE SOUTH –
ROUNDAABOUT IMPROVEMENTS**

**DESK-BASED CULTURAL HERITAGE
ASSESSMENT**

Albion
archaeology



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ASSESSMENT**

Project: BS2174

Document: 2013/88
Version 1.0

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Issue date: 17th May 2013

Produced for:
Vectos Infrastructure Ltd



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Preface

All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

This document was researched and written by Christiane Meckseper (Project Officer). The figures were prepared by Joan Lightning (CAD Technician). Albion Archaeology projects are under the overall management of Drew Shotliff (Operations Manager) and Hester Cooper-Reade (Business Manager).

Albion Archaeology is grateful to Mike Standring of Vectos Infrastructure Ltd. for commissioning the report. We would also like to acknowledge the assistance of Sam Mellonie (Historic Environment Officer, Central Bedfordshire Council) and the staff at the Bedfordshire and Luton Archives and Records Service.

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Version History

<i>Version</i>	<i>Issue date</i>	<i>Reason for re-issue</i>
<i>1.0</i>	<i>17/05/2013</i>	<i>n/a</i>

Structure of this Document

Section 1 provides the planning and geographical background to the proposed development. Section 2 lists the relevant planning policies and research frameworks and also states the aims and methodology of the study. Section 3 contains the assessment of all heritage assets within the study area while Section 4 focuses on the impact of the proposed works on known and potential assets within the site. Section 5 is the bibliography. The appendices in Section 6 list in detail the HER records and cartographic sources used in this study.



Key Terms

Throughout this report the following abbreviations are used:

Albion	Albion Archaeology
BLARS	Bedfordshire and Luton Archives and Record Service
CBC	Central Bedfordshire Council
DBD	Designations Bedfordshire
EBD	Events Bedfordshire
EH	English Heritage
HELM	Historic Environment Local Management
HER	Historic Environment Record for Central Bedfordshire
IfA	Institute for Archaeologists
NPPF	National Planning Policy Framework
OS	Ordnance Survey
PAS	Portable Antiquities Scheme



Non-technical Summary

Vectos Infrastructure Limited are gathering information in support of the detailed highway design for a proposed improvement scheme to the existing roundabout on the A1, to the south of Biggleswade, at its junction with the A6001 London Road.

As part of this work, Albion Archaeology has been commissioned to prepare this desk-based cultural heritage assessment. It characterise the nature, date and likely survival of known and potential heritage assets within the site of the proposed works and assesses their significance. It also assesses the likely impact of the proposed works on those heritage assets and their setting.

This assessment has been drafted in accordance with the National Planning Policy Framework (NPPF), which was issued by the government in March 2012 and the Design Manual for Roads and Bridges, Volume 11.

Historical and archaeological remains listed in the Historic Environment Record (HER) within 500m of the site of the proposed works, and designated heritage assets (Listed Buildings, Scheduled Monuments and Conservation Areas) within 2km of the site were reviewed for this desk-based assessment.

Previous archaeological investigations in 2008 have demonstrated that there is a moderate concentration of undated archaeological features in the form of ditches and pits in the arable field immediately adjacent to the A1 Biggleswade South roundabout. An Area of Archaeological Significance was agreed with the Central Bedfordshire Council Archaeologist (CBCA) as a result of the evaluation, which demonstrates that the potential for the survival of archaeological remains on the site is high. The significance of the potential archaeological assets has been characterised as low to medium in line with county and regional archaeological research agendas.

Groundworks associated with the proposed construction of the fourth arm of the junction into the arable field to the west of the roundabout would lead to the destruction of any archaeological remains located within the footprint of the new carriageway. Any impact on archaeological remains could be mitigated by a scheme of archaeological resource management, agreed with the CBCA. This would most likely take the form of a strip, map and sample strategy, carried out in advance of development.

The Grade II listed building of Holme Grove and the scheduled monument of Stratton Park lie more than 500m to the north-west and north-east of the site of the proposed works. They are shielded from the site by open fields and hedgerows and the Stratton Business Park respectively. The proposed works are assessed as having no impact on these designated heritage assets or any other historic buildings, historic landscape components and their setting within the area.

The scheme is associated with a proposed retail park development on land between the A1 and London Road. As a result, there may be potential for a cumulative impact on any cultural heritage assets within the area.



1. INTRODUCTION

1.1 *Planning Background*

Vectos Infrastructure Limited are gathering information in support of the detailed highway design for a proposed improvement scheme to the existing roundabout on the A1, to the south of Biggleswade, at its junction with the A6001 London Road.

As part of this work, Albion Archaeology has been commissioned to prepare this desk-based cultural heritage assessment. It characterises the nature, date and likely survival of known and potential heritage assets within the site of the proposed works and assesses their significance. It also assesses the likely impact of the proposed works on those heritage assets and their setting. The scope and nature of further archaeological works to mitigate any impacts is also set out.

1.2 *Site Location and Description*

The A1 Biggleswade South roundabout lies to the south of Biggleswade and forms the junction of the A1 with the A6001 London Road. It is centred on grid reference TL 204428. The proposed alterations to the roundabout and new highway are largely situated on land that is currently part of Beauford Farm to the west of the roundabout and consists of set-aside agricultural land.

Topographically the area to the west of the roundabout embankments is on fairly level ground sloping very slightly from 40m to 35m OD from north to south. The underlying geology consists of Boulder Clay over Lower Greensand.

1.3 *National Policy Framework*

This assessment aims to implement the vision for the historic environment as set out in the *National Planning Policy Framework – Section 12: Conserving and enhancing the historic environment* (NPPF) that was published on 27 March 2012 (DCLG 2012) and replaces the previous *Planning Policy Statement 5: Planning for the Historic Environment*.

Annex 2 of the NPPF defines heritage assets as: “A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. Heritage assets include designated heritage assets and assets identified by the local planning authority (including local listing)” (NPPF, Annex 2).

Designated assets comprise, amongst others, Scheduled Monuments, Listed Buildings, Registered Parks and Gardens and Conservation Areas.

Undesignated assets are any heritage assets that may formally be identified by the local planning authority to be important for the area, for example through local listing or as part of the plan-making process. These undesignated assets are still material in planning decisions and evidence of local listing and



information on these heritage assets is held in the local Historic Environment Record (HER).

According to the NPPF the significance of heritage assets is demonstrated by their value to this and future generations because of their archaeological, architectural, artistic or historic interest and their setting.

National and regional planning policy and research frameworks provide the setting within which the heritage assets affected by the proposed development can be characterised and their significance assessed. The potential impact of the proposals on them can then be evaluated and, as necessary, appropriate mitigation measures proposed. This will include potential impacts on the setting of heritage assets within and close to the site of the proposed works.

1.4 Research Frameworks

English Heritage has produced an extensive library of national guides covering a wide range of topics, and most of these are available for free download from the HELM website¹.

Research frameworks that have been devised for the region are *Research and Archaeology: A Framework for the Eastern Counties – 2 Research Agenda and Strategy* (Brown and Glazebrook 2000), *Research and Archaeology Revisited: a revised framework for the East of England* (Medlycott 2011) and specifically for Bedfordshire: *Bedfordshire Archaeology. Research and Archaeology: Resource Assessment, Research Agenda and Strategy* (Oake et al 2007).

These documents provide a comprehensive chronological review of the historic environment as investigated so far within Bedfordshire and the eastern counties as well as establishing a research agenda and strategy for future investigations and for consolidating and integrating current knowledge. They are therefore vital tools for the assessment of any heritage asset within its local, regional and national historic environment setting.

The relevant research aims for each period are discussed in Section 3.5.

1.5 Methodology

This assessment has been drafted in accordance with the *National Planning Policy Framework* (NPPF), which was issued by the government in March 2012 and the *Design Manual for Roads and Bridges, Volume 11* (Highways Agency 2013). Guidelines for desk-based assessment also exist in the form of the Institute for Archaeologists' *Standard and Guidance for Historic Environment Desk-Based Assessment* (IfA 2012) and Central Bedfordshire Council's *General guidance for the preparation of archaeological desk-based assessments* (CBC 2012).

¹ Historic Environment Local Management (HELM) <http://www.helm.org.uk>.



Information on undesignated heritage assets within a 500m radius of the site of the proposed works was obtained from the HER (Figure 2). Information on designated heritage assets within a 2km radius of the site was obtained from the HER (Figure 3).

During the preparation of this document, the sources of information listed below were consulted.

1.5.1 Central Bedfordshire’s Historic Environment Record (HER)

This is a database of archaeological information containing written and pictorial records of known archaeological monuments, previous archaeological investigations, find spots and buildings of historical and archaeological significance.

The HER contains information specific to Central Bedfordshire and is maintained by Central Bedfordshire Council, Chicksands.

1.5.2 Previous Archaeological Investigations

Information on previous archaeological investigations is held in the HER and either catalogued under its relevant HER number and/or additionally under its own “Event”. Information from previous archaeological investigations can give valuable evidence as to the presence, absence, nature and date of below-ground heritage assets within a given area of investigation.

1.5.3 Portable Antiquities Scheme data

The Portable Antiquities Scheme (PAS) is a DCMS-funded project for the voluntary recording of objects found by the members of the public in England and Wales. The majority of these are objects found by metal detector. They usually represent stray finds which are not in a secure archaeological context but can give a useful indication of the potential presence of archaeological or historical sites or assets nearby. PAS data is held and distributed by the relevant HER.

1.5.4 Cartographic data

Early maps and other illustrations of an area can be a very productive area of research. Often they indicate dramatic changes in land use during the post-medieval and modern periods. This can be very helpful in appreciating how the archaeological resource may have been affected by the changes in farming practices and expansion of settlements that took place during the 19th and 20th centuries in particular.

The principal source consulted in this case was the Bedfordshire and Luton Archives and Records Service (BLARS). The BLARS is maintained by Bedford Borough Council and Central Bedfordshire Council. A list of the cartographic sources consulted for this assessment is given in Appendix 4.



1.5.5 Walk-over survey

As part of the heritage asset assessment a preliminary walk-over survey of the site was undertaken on 10th May 2013. It was undertaken with the following aims:

- To verify, where appropriate, the results of the desk-based survey.
- To examine any areas of archaeological potential identified during research for the assessment, in particular with a view to gauging the possible survival or condition of any remains present.
- To consider the significance of any above-ground structures, historic buildings or historic landscape features present.



2. BASELINE CONDITIONS

2.1 Introduction

Figures 2 and 3 should be viewed in conjunction with this text, which reviews the known archaeological and historical heritage assets within the site of the proposed works and the wider study area. All archaeological and historical assets listed in the HER within a 500m study radius are reviewed, together with all designated assets within a 2km study radius.

Numbers given in the text and figures are the local HER entry numbers. For designated heritage assets the local designation number is given (Designations Bedfordshire = DBD); this is cross referenced to the National Heritage List for England (NHLE) number in Appendix 3.

The discussion follows the guidelines set out in the *Design Manual for Roads and Bridges: Volume 11* (Highways Agency 2013).

2.2 Archaeological Remains

For the purposes of this document, the heritage assets listed below are presented in chronological order from prehistoric to modern. Lists of all heritage assets and events recorded by the HER within the study area are contained within Appendices 1–3.

2.2.1 Prehistoric (before AD 43)

Enclosures, boundary ditches and a trackway (HER 13956, HER 18284) dating to the Iron Age were identified to the east of the A1 Biggleswade South roundabout through cropmark evidence and subsequent evaluation and excavation (EBD 671, 668, 669, see above). Artefacts within the features suggest that the enclosures were closely located to a settlement but a settlement focus as such was not revealed.

Of note is the find of a fragment of a copper alloy spearhead of middle to late Bronze Age date (HER 18661) which was retrieved from a field c. 480m to the south-west of the A1 roundabout.

2.2.2 Roman (AD 43–c. AD 400)

The A6001 London Road lies on the line of the Sandy to Godmanchester Roman road (HER 505). Ditches found during the archaeological investigations to the east of the site of the proposed works suggest the presence of a potential Roman field system.

In general, Roman material recovered from the sides of the road within the study area has so far been sparse. Five Roman coins and a pin (HER 18476) were found by metal detecting immediately to the south of Beauford Farm and small amounts of intrusive Roman pottery sherds were retrieved from features excavated during the archaeological investigations to the east and west of the current A1 road. A late Roman rim sherd recovered from the land at Beauford Farm has its own HER entry (HER 19382).



This indicates that Roman settlement was present in the area, but no settlement site has yet been mapped close to the site of the proposed works.

2.2.3 Anglo-Saxon (c. AD 410–1066)

No heritage assets dating to the Anglo-Saxon period have yet been recorded from within the study area.

2.2.4 Medieval (1066–1550)

The deserted medieval settlement of Holme (HER 465) lies adjacent to the study area, c. 300m west of the A1 roundabout. Previous archaeological investigations (EBD 483, 484, see above) have revealed settlement features of Saxo-Norman date, including a post-built timber building and boundary ditches. Settlement evidence was confined to the western margin of the study area. The majority of land to the east of Holme village was characterised by medieval agricultural cultivation and a large number of ridge and furrow marks were recorded during the investigations.

A medieval buckle (HER 18477) was found by metal detecting immediately to the south-west of Beauford Farm.

2.2.5 Post-medieval (1550–1900)

The landscape within the study area is characterised by large-scale fields with associated farm complexes created during the enclosure period in the 18th and 19th century. Holme Grove Farm, which includes a Grade II listed 18th-century farmhouse (DBD 2216 discussed below), is one of those complexes and is located c. 500m to the north-west of the site of the proposed works.

Several field names are mentioned in the HER and indicated on the Estate map of 1781 (Figure 5). These are “Grand Burry” (HER 13932), “Barn Close” (HER 13922), “Malthouse Close” (HER 13933) and “Brickhill Field” (HER 13934). In Bedfordshire, the name “Bury” is usually indicative of a manorial settlement with medieval origins, while the other field names indicate the sites of a former barn, malthouse and brickworks.

Metal detecting also retrieved part of a cauldron leg and mount (HER 18478) and a belt fastener (HER 18597) to the south of Beauford Farm.

2.2.6 Modern (1900 – present)

No heritage assets dating to the modern period are recorded in the HER within the study area.

2.2.7 Scheduled Monuments

The scheduled monument of the Stratton Park moated enclosure (DBD 464) lies c. 800m to the north-east of the site of the proposed works (Figure 3). The monument includes the remains of a medieval moated enclosure and adjacent manorial complex. Adjacent to the east side of the moat are the remains of a complex network of hollow-ways, fields and platforms. Extended



archaeological excavations to the west of the scheduled monument have revealed settlement evidence dating from the early to the late medieval period.

The scheduled monument of Holme Mill Iron Bridge (DBD 4019) is a cast iron bridge built in 1832 as part of the canalisation of the River Ivel. It lies 2km to the west of the A1 Biggleswade South roundabout (Figure 3).

2.2.8 Previous archaeological investigations

Several phases of archaeological investigation were undertaken by Albion Archaeology between 2001 and 2004 on land in the eastern part of the study area prior to the construction of a balancing pond and feeder ditch adjacent to Beauford Farm (EBD 524, EBD 483).

The investigations identified Bronze Age to Iron Age enclosures and land divisions and a Roman field system on a different alignment. The western part of the excavation extended into the margin of the deserted medieval settlement of Holme (HER 465). However, the site also revealed a large number of ridge and furrow agricultural features which indicated that throughout the medieval period the majority of the site was under arable cultivation. Post-medieval field boundaries and quarrying were also recorded.

The feeder ditch extends into the site of the proposed works (Figure 4) and the majority of features recorded within its footprint consisted of medieval ridge and furrow marks and features of geological origin.

A further trial trench evaluation was undertaken in 2008 to the north of the previous investigations (EBD 484, EBD 494). This identified Iron Age, Roman and medieval features in the western part of the site correlating with evidence revealed in the earlier investigation. Ridge and furrow cultivation marks again dominated in the eastern part of the site, but an area of activity consisting of a concentration of undated pits and ditches was also revealed.

The nature of the fills and the absence of modern finds suggest that this activity was of some antiquity and it was subsequently designated as an Area of Archaeological Significance with the agreement of the CBCA (Figure 4).

Several archaeological investigations were carried out to the east of the A1 Biggleswade South roundabout in the area of the Stratton Business Park in 2004 and 2007 (EBD 668, EBD669, EBD671). This revealed evidence for Iron Age enclosures, field systems and a trackway.

An evaluation undertaken on the site of a proposed wind farm to the south-west of Biggleswade in 2009 (EBD966) found a number of undated shallow linear features and postholes as well as medieval ridge and furrow agricultural features.



2.3 Historic Buildings

2.3.1 Listed Buildings

Biggleswade Conservation Area is dissected by the north-south railway line and one of the platforms of Biggleswade Station is Grade II listed (DBD 173).

A Grade II listed new spring water pumping station engine house (DBD 3612) and its wall and gate piers (DBD 2425) are located by the side of the A1 c. 1.45km to the south of the A1 Biggleswade South roundabout.

The Grade II listed building of Holme Grove (DBD 2216) lies just outside the 500m study radius (Figure 2) and c. 800m to the north-west of the centre of the A1 roundabout. Holme Grove is an 18th-century red brick farmhouse with later restoration. Today it is part of a modern farm complex.

2.3.2 Conservation Area

Biggleswade Conservation area (DBD 3247) focuses on the historic core of Biggleswade around the western end of the High Street, c. 2km to the north-west of the A1 Biggleswade South roundabout.

2.4 Historic Landscape and Cartographic Evidence

This section contains a discussion of selected historical maps, illustrating the changes occurring on the site and in the general vicinity from the 19th century onwards. Copies of the maps discussed below are bound towards the back of the report (Figures 5–8).

2.4.1 1781 estate map (Figure 5)

The 1781 estate map shows the area to be agricultural and subdivided into several large fields which were most likely created during enclosure. No enclosure award exists for the parish of Biggleswade but most parishes in Bedfordshire were enclosed between 1760 and 1820. The site of the proposed works is located within the large agricultural field, numbered “22” on the map, which borders London Road, the old main north-south route.

2.4.2 1838 tithe map (Figure 6)

The tithe map is similar to the earlier estate map but some of the smaller fields have been merged into even larger landholdings. Field “22” has been merged with its neighbouring field “23” and is now numbered field “267”. London Road is still clearly marked bordering the large main field.

2.4.3 1st Edition Ordnance Survey Map, 1882 (Figure 7)

The field boundaries have mainly stayed the same between the tithe map of the early 19th century and the first edition OS map of the late 19th century. The main addition to the map is the development of Holme Court to the north of the large field that is the location of the site of the proposed works.

2.4.4 1966 OS map (Figure 8)

This map shows the constructed Biggleswade bypass (A1) which was the main addition to the countryside in the early 1960s, relieving the traffic from the



London Road, which comes off the bypass as a slip road. The roundabout had not yet been constructed.

2.5 Modern Land Use

Beauford Farm, which is first shown on the OS map of 1973 (no figure), still lies immediately to the south-west of the site of the proposed works, which itself is predominantly open land. The arable field is currently set-aside in anticipation of the construction works and overgrown with long grass and weeds. On the southern margin of the site is the stripped but slightly overgrown corridor of the balancing pond feeder pipe trench with two spoil heaps. The balancing pond and its associated services have not yet been constructed.

The banks of the A1 and roundabout are planted with medium mature trees and shrubs. The northern border of the site of the proposed works is a mature hedgeline which is shown on OS maps from the late 19th century onwards but may date from the enclosure period or earlier.

2.6 Setting

The NPPF defines setting as: *‘The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, and may affect the ability to appreciate that significance or may be neutral’* (NPPF 2012, Annex. 2).

Despite its location immediately adjacent to a major routeway the setting of the site of the proposed works to the west of the roundabout is predominantly rural and characterised by the open agricultural field, bordered by hedges and the buildings of Beauford Farm to its south.

Similarly, the setting of the Grade II listed building at Holme Grove is that of a rural, modernised farm complex of 18th-century origin. It is surrounded by agricultural fields and pasture bordered by mature hedges but lies within sight of the A1 in the north.

To the east of the roundabout the land next to the bypass and London Road has been built up with modern business estates and is more urban in nature.

2.7 Assessment of Potential and Significance

This section assesses the potential for the survival of archaeological heritage assets in the light of the evidence discussed above. The criteria for assessing significance, impact and effect follow those set out in the *Design Manual for Roads and Bridges: Volume 11* (Highways Agency 2013).

The 2008 evaluation has shown that there is a moderate concentration of undated archaeological features in the form of ditches and pits located in the arable field immediately adjacent to the A1 Biggleswade South roundabout. An Area of Archaeological Significance was identified in response to the



evaluation (Figure 4). This demonstrates that the potential for further archaeological remains on the site of the proposed works is *high*.

The ditches are most likely to be the continuation of the Roman and/or medieval field systems identified and dated to the west of the site of the proposed works. The pits may represent associated Roman and medieval agricultural activity or could be part of earlier prehistoric activity on the periphery of a settlement.

The potential for any heritage assets dating to the post-medieval or modern periods is *negligible*.

The archaeological features and potential heritage assets on the site of the proposed works fit into the research theme of “landscape development and settlement pattern” which is defined in both the research framework for Bedfordshire (Oake *et al* 2007) and the regional framework for the Eastern Region (Medlycott 2011).

The previous archaeological investigations have demonstrated that there is a definite pattern in layout, change and re-alignment in the field systems from the Roman to the medieval period and this may be able to be studied further from evidence on the site of the proposed works.

Oake states that many examples of early field systems are imprecisely dated and there is also a lack of investigations which correlate Roman and Iron Age field systems with contemporary settlements (Oake 2007, 11). The study of medieval field systems is also given as a priority in the county research framework, particularly due to Bedfordshire’s unique location within the classic midland system with connections to the neighbouring Northamptonshire and Buckinghamshire systems (Oake 2007, 14).

The potential archaeological assets on the site of the proposed works are therefore of *low* to *medium* significance.



3. IMPACT ASSESSMENT

3.1 *The Proposed Works*

The proposed works consist of the improvement of the A1 Biggleswade South roundabout plus the construction of a full depth carriageway coming off the roundabout in the west. A summary of the proposed works is as follows:

- Changes to carriageway layouts on approach to junction plus introduction of a left turn filter lane from the A6001 to the A1 southbound;
- Widening of northbound exit lane west batter slope and clearance of shrubs in order to meet sight line requirements. Construction of a retaining wall up to 3m in height;
- Clearance of existing shrubs and trees and removal of ditch along western edge of carriageway and roundabout;
- Addition of a fourth arm of the junction in the form of a new full depth carriageway in arable field to the west of the existing A1 roundabout.

3.2 *Direct Impacts on Archaeological Remains*

Changes to the carriageway layouts will be undertaken as overlays to the existing highway and not involve any ground reduction. Therefore, this work will have *no impact* on any archaeological assets.

The A6001 does follow the line of the proposed Roman road. However, the footprint of the construction of the southbound filter lane from the A6001 and widening of the batter slope and construction of a retaining wall does not go beyond any previously constructed embankment and drainage ditch. This work is, therefore, considered to have *no impact* on any archaeological remains.

The verges and central reserves within the existing highway are made ground and up to 2m deep. The removal of trees and the ditch along its edges and batter slopes in the east and west will, therefore, have *no impact* on any archaeological assets.

The construction of the fourth arm of the junction in the form of a new full depth carriageway will be undertaken in a mixture of cut and fill conditions. Any groundworks associated with the construction of this carriageway will impact negatively on the potential archaeological assets within the Area of Archaeological Significance (Section 1.5.2 and Figure 4) and adjacent to it. This impact is classed as *moderate negative*.

3.3 *Direct Impacts on Historic Buildings and Landscapes (Setting)*

The Grade II listed building of Holme Grove lies *c.* 500m to the north-east of the site of the proposed works. It lies within its own, modernised farm complex and is surrounded by open fields. The complex of Holme Grange with its surrounding parkland of mature trees and several mature hedges lies between Holme Grove and the site of the proposed works, shielding it from the proposed development.



The Scheduled Monument of Stratton Park moated enclosure lies more than 500m to the north-east of the site of the proposed works and is shielded from the A1 Biggleswade South roundabout by the Stratton Business Park.

The proposed works will have *no impact* on the setting of these or any other extant heritage assets.

3.4 **Mitigation Measures and Assessment of Residual Effects**

This assessment indicates that parts of the proposed works contain archaeological remains of some significance that would be impacted by construction. The likely impact is significant enough to require mitigation.

Mitigation will take the form of a scheme of archaeological resource management. A strip, map and sample archaeological mitigation strategy covering the Area of Archaeological Significance was drawn up in 2011 (Albion Archaeology 2011). The Central Bedfordshire Council Archaeologist has confirmed that subject to the necessary updated documents and consultation this mitigation strategy is still applicable (Hannah Firth pers comm. 13 May 2013).

After mitigation, the significance of the residual effect of the proposed development on any archaeological remains would be *slight*.

3.5 **Cumulative Impacts**

The effects assessed in this report are for the proposed changes to the A1 Biggleswade South roundabout only. However, it has to be borne in mind that the scheme is associated with a proposed retail park development on land between the A1 and London Road, which may have a significantly higher impact on any cultural heritage assets within the area.

3.6 **Summary**

The following table summarises the known and potential heritage assets **within the site of the proposed works**. It covers the prehistoric to the modern periods and also gives an indication of the relative significance of those remains when considered on a local/regional/national basis and the development impact in the light of the nature of the development.

Asset	Impact	Value/ Sensitivity	Magnitude of Impact	Significance of effect
Archaeological remains	Direct permanent destructive impact on substantial parts of the asset	Low to medium	Moderate negative	Moderate
Grade II listed buildings / SAM	No impact	High	No change	Neutral
Historic Landscape/ Setting	No impact	n/a	No change	Neutral



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5. APPENDICES

5.1 Appendix 2 – HER Entries within a 500m-radius Study Area

HER no.	Name	Description	Period
505	SANDY-GODMANCHESTER ROMAN ROAD (Viatores Road 22)	The major Roman road between Sandy and Godmanchester survives for much of its course as field boundaries, but has not been reused in modern times.	Roman
13922	BARN CLOSE, Biggleswade	A barn mentioned in the 18th century.	Post-medieval
13932	GRAND BURRY, Biggleswade	A field name mentioned in the 18th century.	Post-medieval
13933	MALT HOUSE CLOSE, Biggleswade	Mentioned in the 18th century, it is the site of a malt house.	Post-medieval
13934	BRICKHILL FIELD, Biggleswade	The site of an old brickworks.	Post-medieval
13956	CROPMARKS, West of Stratton Farm	Triangular enclosure with rounded corners visible as cropmarks. Excavations revealed fourteen features, the majority ditches, but no dating evidence.	Undated
18284	IRON AGE SETTLEMENT, Stratton Business Park (western area)	Aerial photo analysis identified a series of curvilinear cropmarks. Subsequent archaeological excavations revealed ditches and pits dated to the middle Iron Age, indicative of a settlement focus.	Prehistoric
18476	ROMAN FINDS, Beauford Farm	Five Roman coins and a pin found by metal detecting.	Roman
18477	MEDIEVAL BUCKLE AND JETTON, Beauford Farm	A medieval buckle found by metal detecting	Medieval
18478	POST-MEDIEVAL FINDS, Beauford Farm	A post-medieval cauldron leg and mount found by metal detecting.	Post-medieval
18597	POST-MEDIEVAL CLOTHING FASTENER, south east of Beauford Farm	A copper-alloy object, most probably part of a belt fastener, found by metal detecting.	Post-medieval
18661	BRONZE AGE SPEARHEAD, south of Beauford Farm	A fragment of a copper-alloy spearhead of middle to late Bronze Age date.	Prehistoric
19382	ROMAN POTTERY, Beauford Farm	A rim sherd from a late Roman pottery vessel of South Midlands shell-tempered ware.	Roman



5.2 Appendix 3 – Designated Heritage Assets within a 2km-radius Study Area

HER no.	NHLE no.	Description	Period
Listed buildings			
2216	1114492	HOLME GROVE. Farmhouse, C18 with later restoration. Red brick, 2 storey. Old clay tile roof with gable coping. Five double hung sashes with glazing bars, 6 panel door with rectangular fanlight, wooden doorcase with flat hood on consoles. Grade II listed.	Post-medieval
3612	1137763	New Spring Water Pumping Station, Engine House And Pump Master's House. Grade II listed.	Post-medieval
173	1137769	Railway Platform Building at Biggleswade Station. Grade II listed.	Post-medieval
2425	1114502	Wall and Gate Piers to Pumping Station London Road (Great North Road) Biggleswade. Grade II listed.	Post-medieval
Scheduled Monuments			
4019	1005395	Holme Mill Iron Bridge	Post-medieval
464	1012161	<p>Stratton Park moated enclosure and associated manorial earthworks.</p> <p>The monument includes the remains of a medieval moated enclosure and adjacent manorial complex. The almost square moated site measures 84m across and is surrounded by a 13m wide moat which is about 1.5m deep and partially water-filled. Part of an outer bank can be seen along the northern arm of the moat. Entrance to the interior is on the south side across a 2m wide causeway. The flat island is slightly raised above the surrounding land. There are no visible remains of internal buildings or features.</p> <p>The moat is identified with the original medieval manor of Stratton, but was replaced as the main residence when the lord of the manor moved to nearby Stratton Park House in the 16th century.</p> <p>Adjacent to the east side of the moat are the remains of a complex network of hollow-ways, fields and platforms. These survive as well-defined earthworks, often up to 1m in height and are interpreted as the sites of contemporary manorial out-works comprising of horticultural plots and out-house buildings associated with the moated site.</p>	Medieval to post-medieval
Conservation Area			
3247	n/a	Biggleswade Conservation Area	n/a



5.3 Appendix 4 – Events within a 500m-radius Study Area

Event ID	Name	Description	Organisation
524	Land north of Beauford Farm, Stratton	Archaeological desk-based study and geophysical survey	Albion Archaeology 2001
483	Beauford Farm, Stratton,	Archaeological field evaluation	Albion Archaeology 2002
484	Land at Beauford Farm, Biggleswade, Bedfordshire	Archaeological field evaluation	Albion Archaeology 2008
494	Land at Beauford Farm, Biggleswade	Results of the archaeological monitoring of geotechnical investigation	Albion Archaeology 2008
668	Stratton Business Park - Western Area, Biggleswade	Archaeological field evaluation	Albion Archaeology
669	Stratton Business Park Access Road, Biggleswade:	Trial excavation	Albion Archaeology
671	Land West of Stratton Farm, Biggleswade	Non-intrusive stages of archaeological field evaluation	Albion Archaeology
966	Biggleswade Wind Farm, Biggleswade	Archaeological field evaluation	Museum of London Archaeology Service

5.4 Appendix 5 – List of Cartographic Sources

Location and ref	Description
BLARS	1781 estate map
BLARS, MAT 5/1	1838 tithe map
BLARS, sheet 206/190	1882 1st edition 25 inch OS map
Albion	1966 – 2012 OS maps

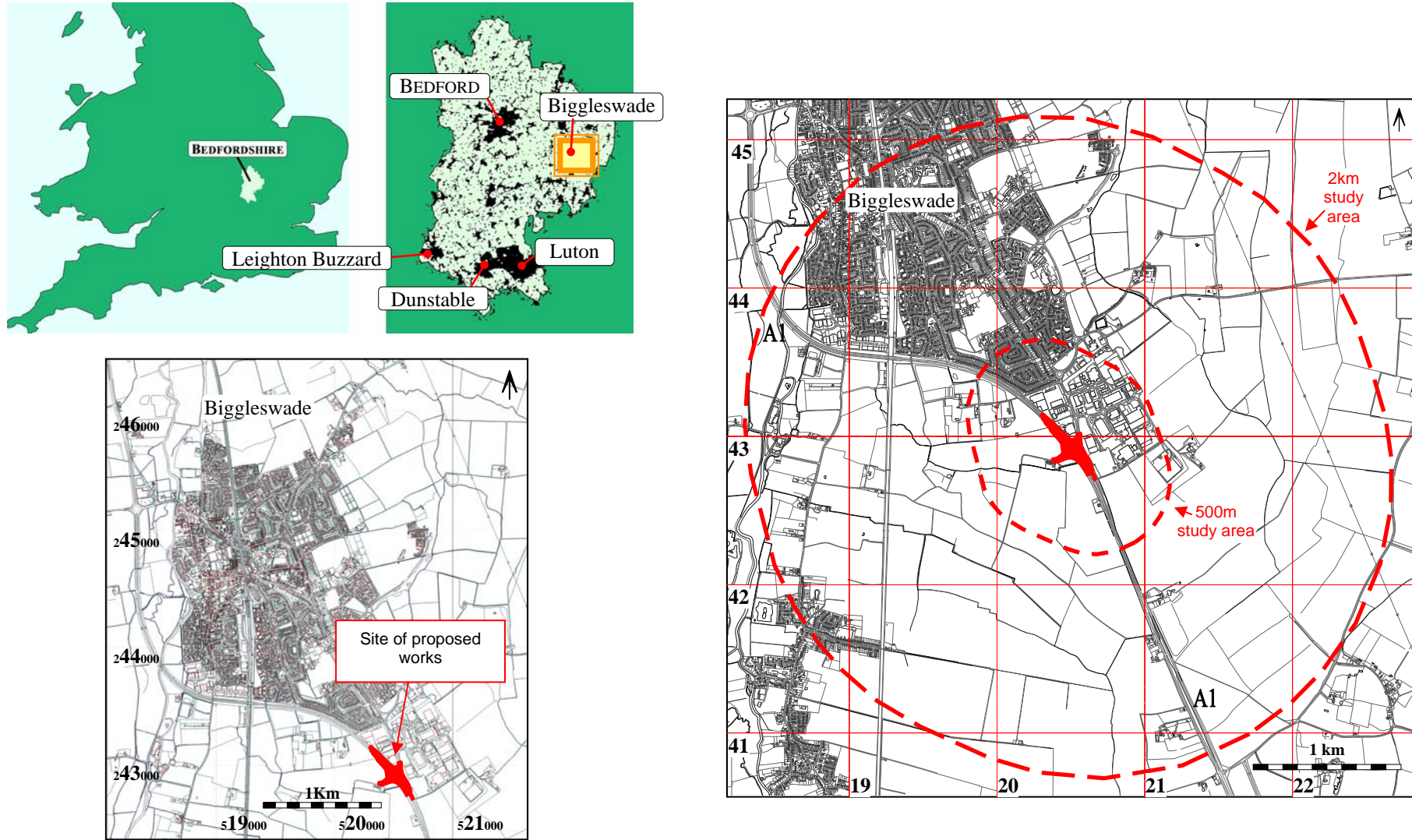
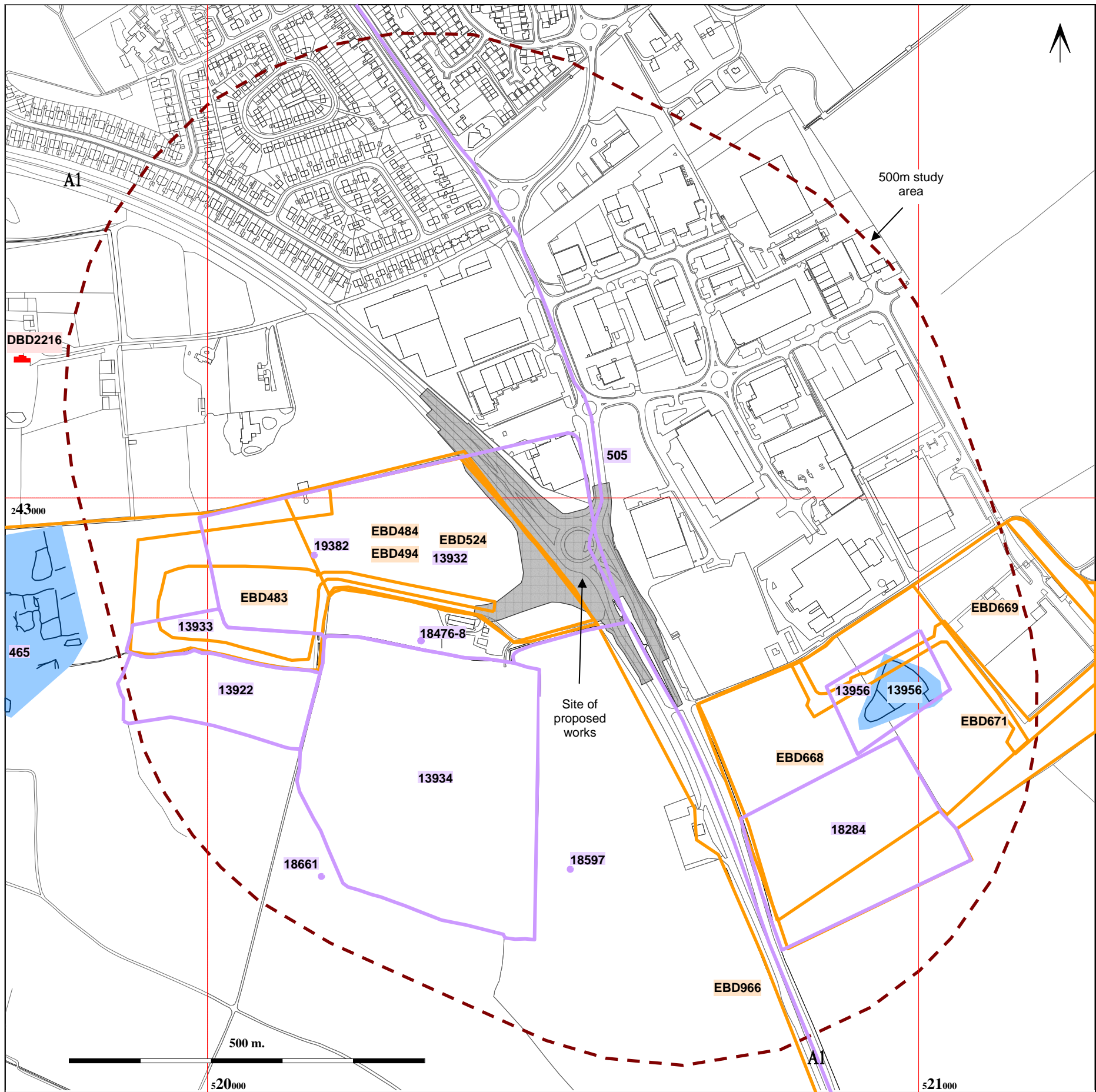


Figure 1: Site Location

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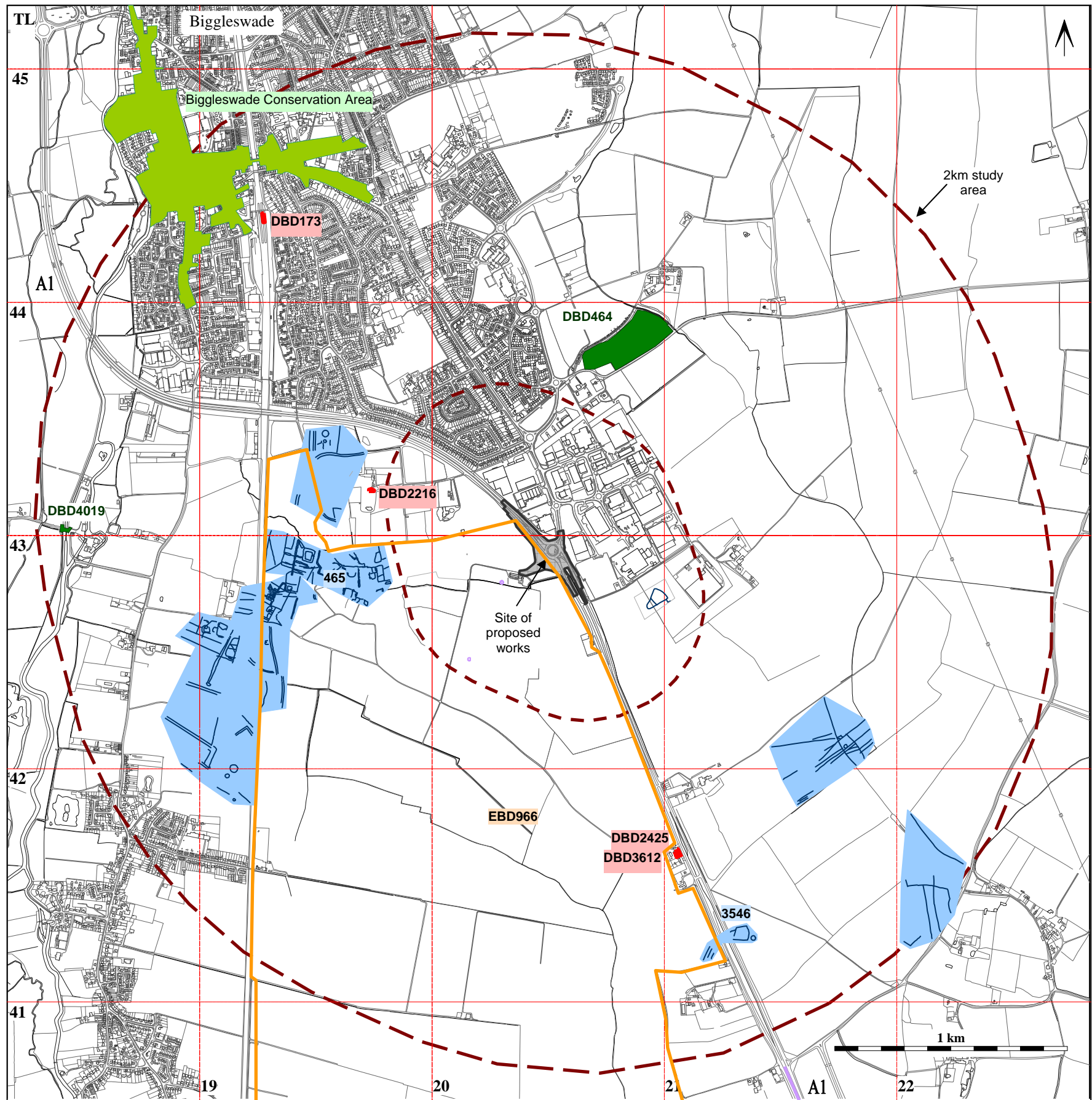


Key:

- 1234 Cropmark areas
- EBD123 Events
- 13934 Monuments
- DBD123 Listed buildings

Figure 2: Historic Environment Record (HER) entries within 500m of the proposed works

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Key

Biggleswade	Conservation Area
DBD123	Scheduled monument
1234	Cropmark areas
EBD123	Events
DBD123	Listed buildings

Figure 3: Designated heritage assets and cropmark complexes within 2km of the proposed works

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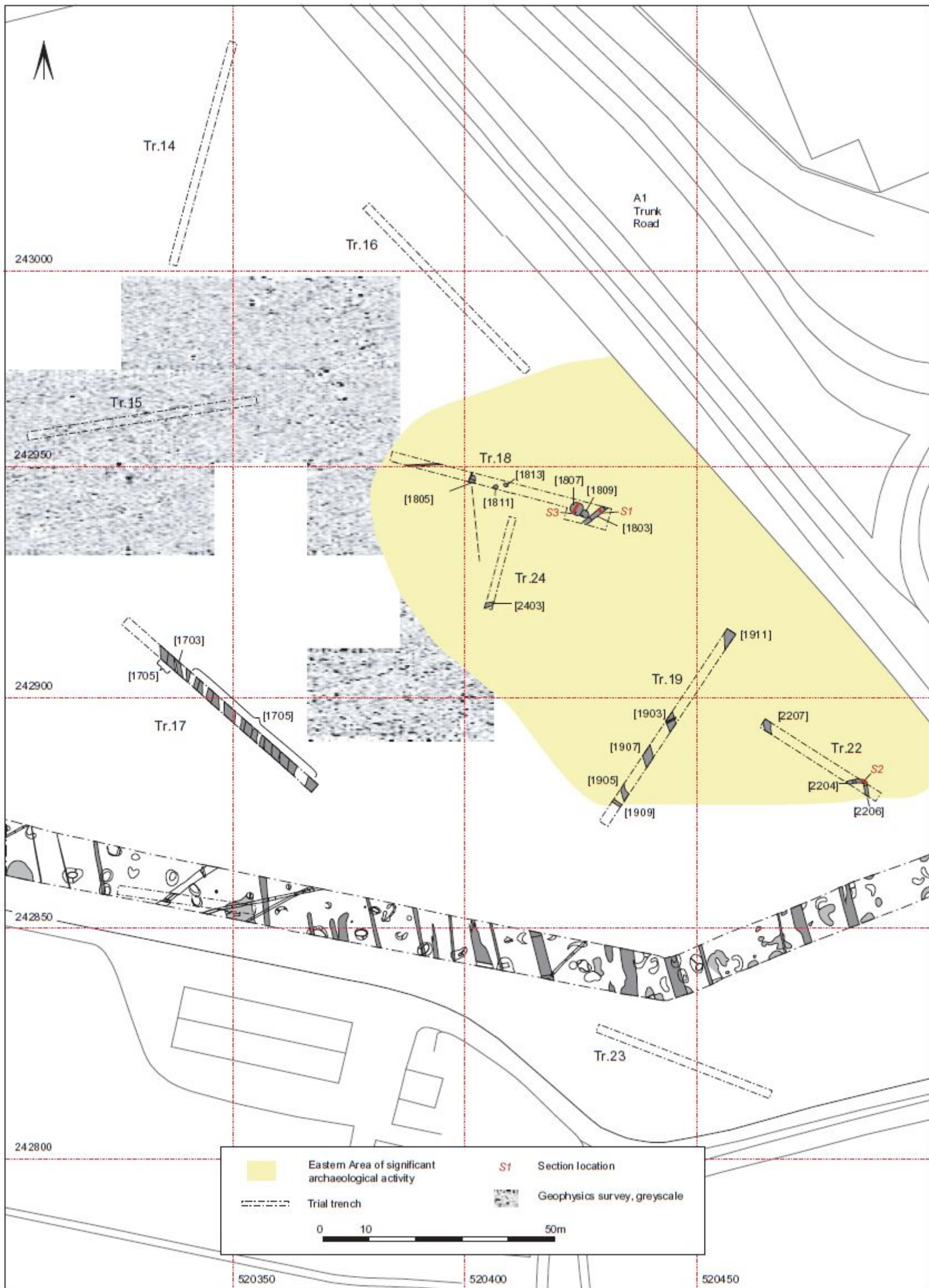


Figure 4: 2004 feeder ditch excavation and 2008 evaluation and Area of Archaeological Significance (Albion Archaeology 2008, Figure 9)

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Figure 5: 1781 estate map with overlay of modern OS map

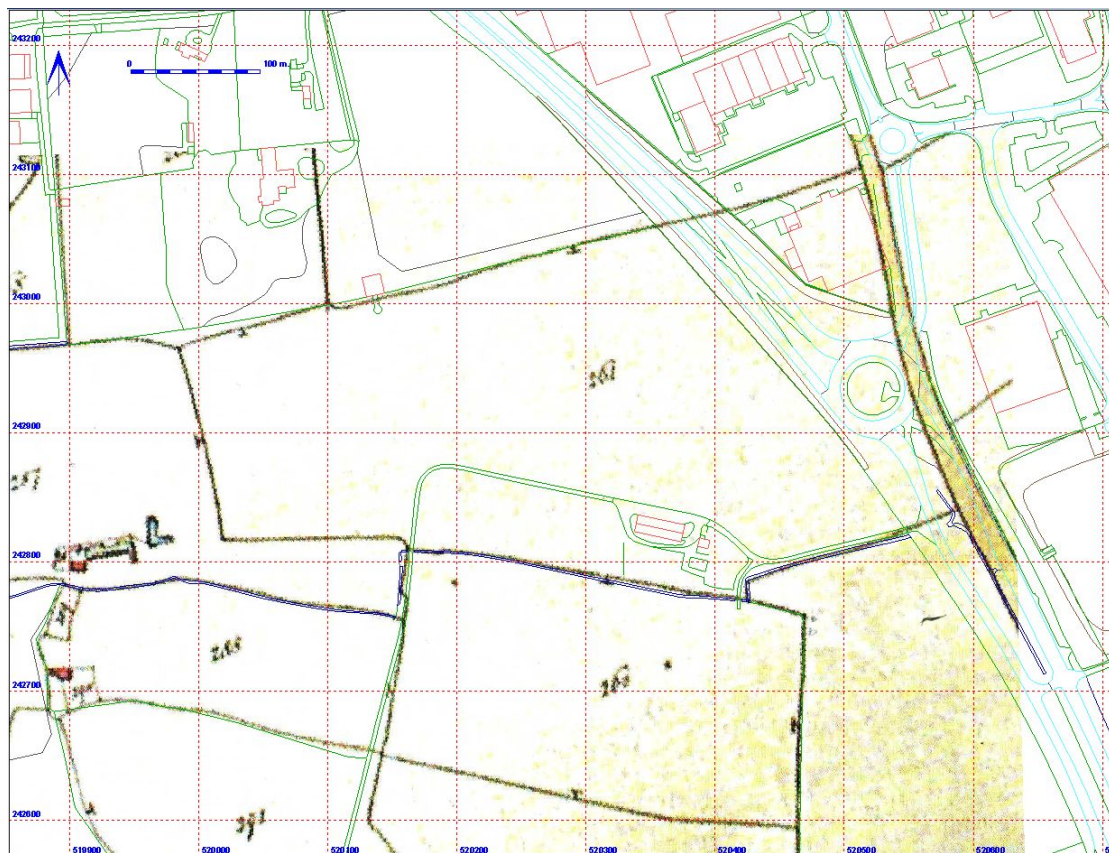


Figure 6: 1838 tithe map with overlay of modern OS map

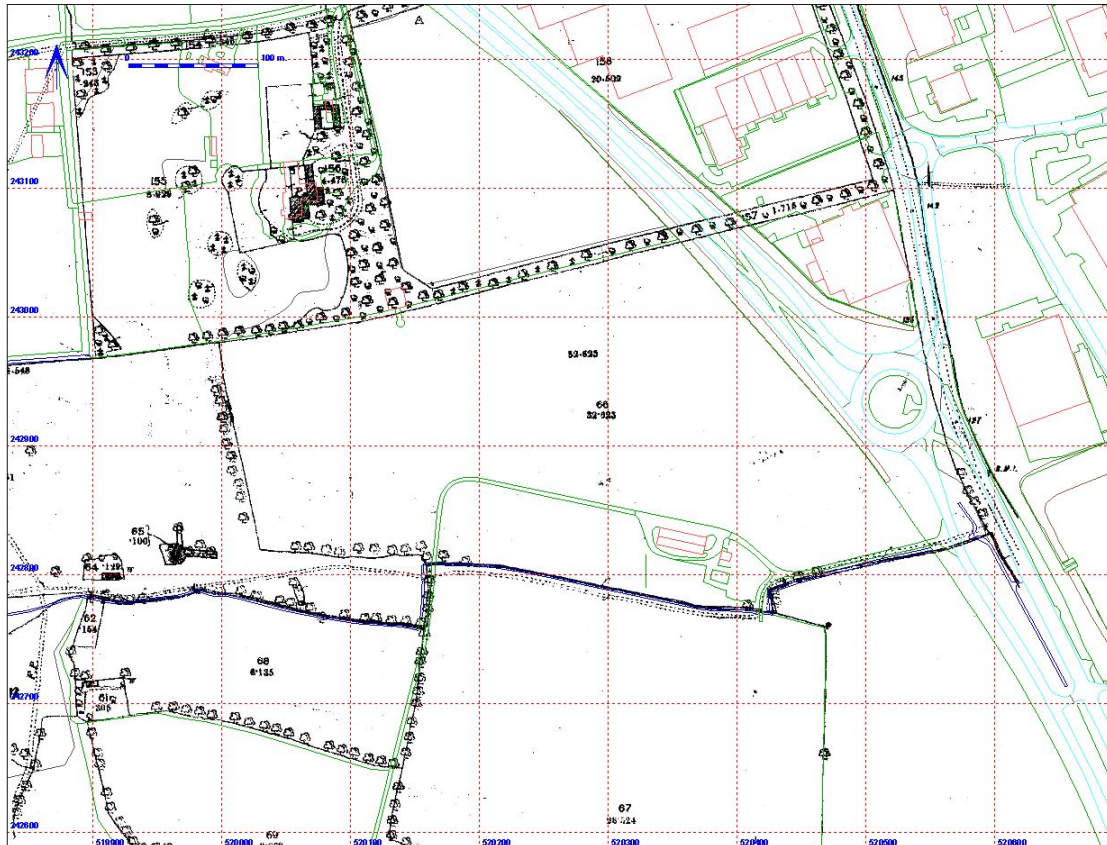


Figure 7: 1882 first edition OS map with overlay of modern OS map

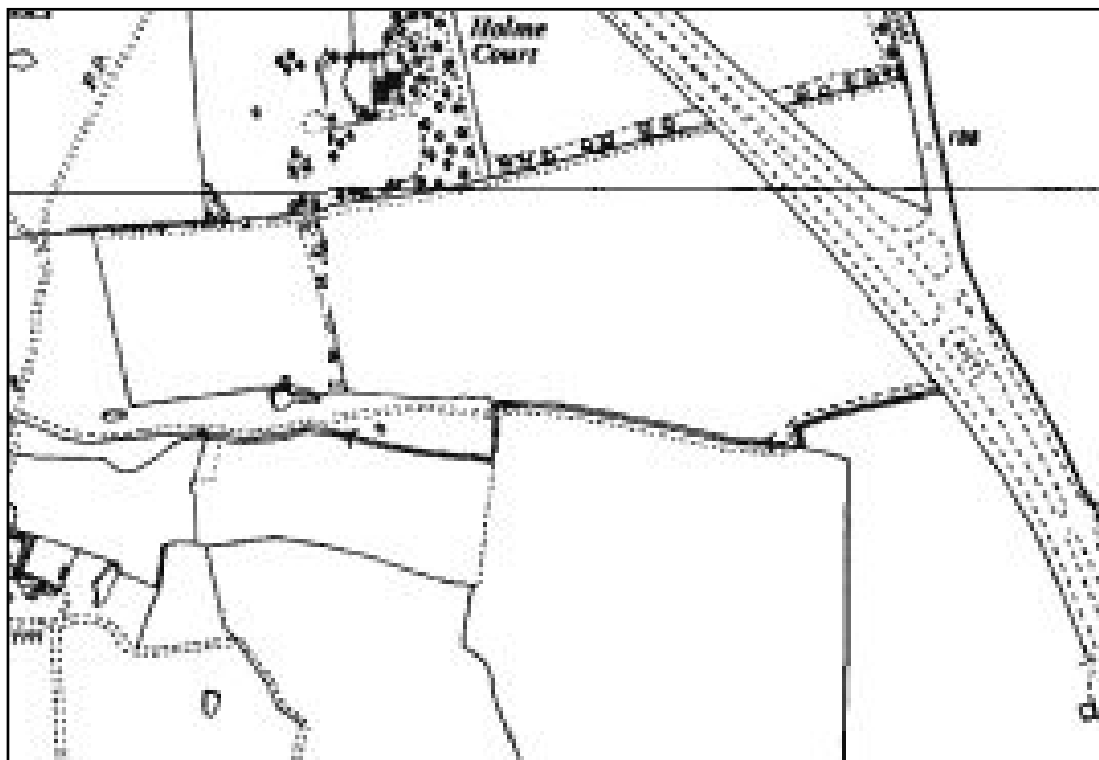


Figure 8: 1966 OS map (scale 1:10,560)

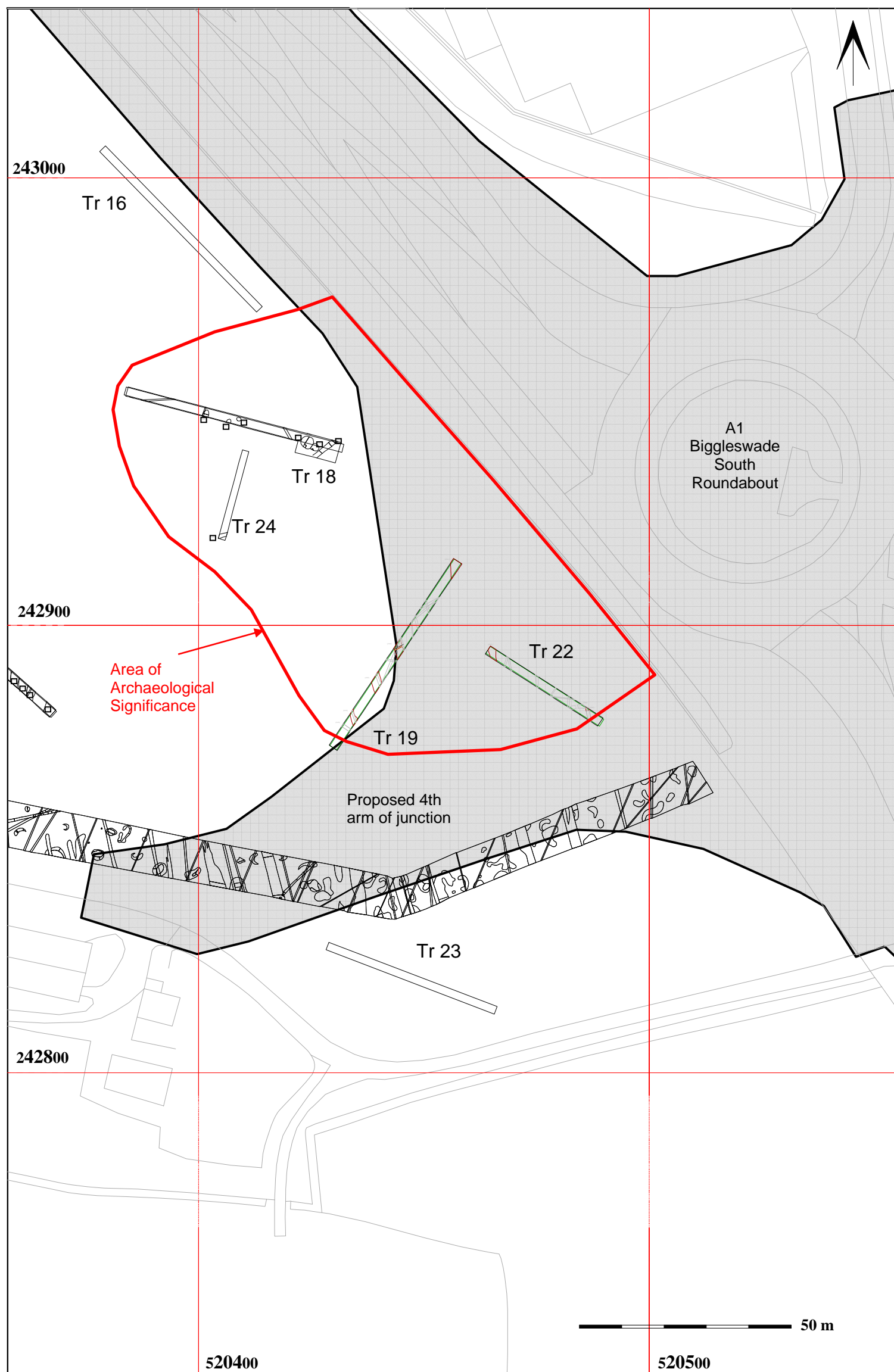


Figure 9: Area of Archaeological Significance overlaid with site of proposed works

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