35 CHURCH ROAD
STUDHAM
BEDFORDSHIRE

HERITAGE STATEMENT

Albion
archaeology
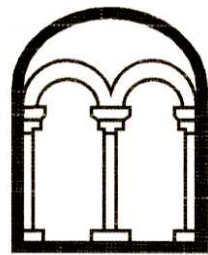
35 CHURCH ROAD
STUDHAM
BEDFORDSHIRE

HERITAGE STATEMENT

Project: CS2556

Document: 2016/33
Version 1.0

HER search number: 201516/295

Compiled by	Approved by
Mark Phillips	Drew Shotliff

Issue date:
15th February 2016

Produced for:
John Edgell Ltd

On behalf of:
Mrs N Horton

Contents

List of Figures

Figure 1: Site location
Figure 2: Heritage assets within 500m of the proposed development area
Figure 3: Overall plan of village in 1926
Figure 4: 1811 untitled map of Studham
Figure 5: 1847 Church End Farm
Figure 6: 1852 Tithe apportionment map
Figure 7: 1885 Ordnance Survey map
Figure 8: 1900 Ordnance Survey map
Figure 9: 1926 Ordnance Survey map
Figure 10: 1950 Ordnance Survey map
Figure 11: No. 35 Church Road, facing east
Figure 12: Garden of 35 Church Road, facing north
Figure 13: Church Road, facing south
Figure 14: Church Road, facing south-east
Figure 15: Churchyard, facing south with PDA in background
Figure 16: South boundary of churchyard, looking towards PDA
Figure 17: Existing bungalow in the PDA, front elevation
Figure 18: Existing bungalow in the PDA, rear elevation
Figure 19: Plan and elevations of existing building
Figure 20: Proposed plan and elevations of replacement building

The figures are bound at the back of the report.

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 Mark Phillips (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 John Edgell for commissioning the report on behalf of Mrs N Horton. 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. The images in Figures 7 to 10 are reproduced courtesy of the National Library of Scotland.

Albion Archaeology
St Mary's Church
Bedford, MK42 0AS
☎: 0300 300 8141
Fax: 0300 300 8209
e-mail: office@albion-arch.com
website: www.albion-arch.com

Version History

Version	Issue date	Reason for re-issue
1.0	*15/02/2016*	*n/a*

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 heritage asset assessment. Section 3 contains the assessment of all heritage assets within the study area while Sections 4 and 5 focus on the impact of the proposed development on known and potential assets within the development area. Section 6 is the bibliography. The appendices in Section 7 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
CI*f*A	Chartered Institute *for* Archaeologists
DCMS	Department for Culture, Media and Sport
EBD	Events BeDfordshire
EH	English Heritage
HELM	Historic Environment Local Management
HER	Historic Environment Record for Central Bedfordshire
NPPF	National Planning Policy Framework
NHLE	National Heritage List for England
OS	Ordnance Survey
PAS	Portable Antiquities Scheme
PDA	Proposed development area

Non-technical Summary

John Edgell Ltd are gathering information in support of a planning application (CB/15/04291) for the proposed demolition of an existing bungalow and erection of a new bungalow at 35 Church Road, Studham, Dunstable, Bedfordshire.

In accordance with the National Planning Policy Framework (NPPF), Albion Archaeology has been commissioned to prepare this desk-based heritage statement to characterise the nature, date and likely survival of known and potential heritage assets within the proposed development area (PDA) and to assess their significance. It also assesses the likely impact of the development on those heritage assets and their setting.

The PDA is located at the northern end of Church Road at TL01565/15920 immediately south of the churchyard of the parish church of St Mary the Virgin.

A scatter of Neolithic and early Bronze Age struck flint was found 400m north of the PDA. The suggested course of a Roman road runs 400m to the west.

Studham is mentioned in the Domesday Survey of 1086 and most likely has at least late Saxon origins. The medieval settlement appears to have had two foci: one at the cross-roads c. 700m to the east of the PDA; and the other centred on the parish church and manorial site immediately adjacent to the PDA. The parish church is Grade I listed and originates in the early 13th century. To the east of the PDA is the Grade II listed 17th-century Manor Farm which is partly enclosed by a moat forming part of the medieval manorial centre.

The PDA stands on the site of a pair of 18th-century cottages which were demolished in the mid 20th-century. Other post-medieval heritage assets comprise: two buildings at the southern end of Church Road; a series of former quarry pits in the south-west of the study are; an earthwork enclosure adjacent to the southern part of Church Road; and an area of woodland on the northern edge of the study area.

The proposed building is a replacement for an existing bungalow on the site. The proposed plan would be slightly larger, with an additional room added at the rear of the building in the angle of the existing L-shape plan. The overall size of the proposed building would be approximately 14m by 14m.

The potential and significance of heritage assets and the impact and significance of the impact of the proposed development are summarised in the table below:

Period	*Potential of finding heritage asset on PDA*	*Significance*	*Potential impact*	*Significance of potential impact (before mitigation)*
Prehistoric (pre-43 BC)	*Low*	*Low*	*Low*	*Slight*
Roman (43BC–AD 410	*Low*	*Low*	*Low*	*Slight*

Period	Potential of finding heritage asset on PDA	Significance	Potential impact	Significance of potential impact (before mitigation)
Anglo-Saxon to medieval (410–1550)	Moderate to high	Low to moderate	Low to moderate	Moderate
Post-medieval (1550–1900)	Moderate	Low	Low to moderate	Slight
Modern (1900 – present)	Negligible	Negligible	Negligible	Neutral
Setting	n/a	n/a	Negligible	Neutral / slight

If required by the LPA, any direct impact of the proposed development on potential buried archaeological remains could be mitigated by measures to investigate and record the presence/absence, nature and significance of the potential archaeological assets.

The proposed design would result in no additional visual impact. Any potential impact on the setting of adjacent heritage assets would be negligible. The significance of this impact would be neutral / slight.

1. INTRODUCTION

1.1 Planning Background

John Edgell Ltd is gathering information in support of a planning application (CB/15/04291) for the demolition of an existing bungalow and replacement with a new bungalow at 35 Church Road, Studham, Dunstable, Bedfordshire.

As part of this work, Albion Archaeology has been commissioned to prepare this desk-based heritage statement. Its purpose is to characterise the nature, date and likely survival of known and potential heritage assets within the proposed development area (PDA) and to assess their significance. It also assesses the likely impact of the development 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.

1.2 Site Location and Description

The proposed development area (PDA) is located at the northern end of Church Road at TL01565/15920 (Figure 1). It is situated immediately to the south of the churchyard of the parish church of St Mary the Virgin.

The PDA covers an area of approximately 2150m^2. It currently contains a prefabricated bungalow that was erected during the 1960s (Figures 17, 18 and 19). The surrounding garden is currently under grass with limited planting to the north of the bungalow.

Studham lies close to the border with Hertfordshire and historically the parish was divided between the two counties. In 1897, the two parts were united as a single parish and transferred to Bedfordshire.

Historically, the settlement consisted of two parts (Figure 3). The main village centre was located at the crossroads formed by Church Road, Kensworth Road and Dunstable Road. The PDA is located to the west of the village centre in a separate focus which contained the parish church, a manor house and a few cottages.

Studham lies on the southern slopes of the Chilterns within an undulating landscape. The PDA lies at a height of 188m OD on a clay plateau. The historical village centre to the east lies in a dry valley at a height of approximately 170m OD.

The geology of the PDA is Clay-with-flints superficial deposits above Lewes Nodular Chalk Formation and Seaford Chalk Formation (undifferentiated) bedrock[1].

---

[1] Contains British Geological Survey materials © NERC 2016

2.   OBJECTIVES OF THE HERITAGE ASSET ASSESSMENT

2.1   *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 PDA.

2.2   *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 website[2].

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*

---

[2] Historic Environment Local Management (HELM) http://www.helm.org.uk.

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.

2.3 Methodology

This desk-based assessment was prepared in accordance with the Chartered Institute *for* Archaeologists' *Standard and guidance for historic environment desk-based assessment* (2014) and Central Bedfordshire Council's *General guidance for the preparation of archaeological desk-based assessments* (2012).

Information on the known heritage assets within a 500m radius of the PDA was obtained from the HER (HER search number: 201516/295) (Figure 2).

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

2.3.1 The National Heritage List for England

The National Heritage List for England is an online searchable database of designated heritage assets (excluding conservation areas). It holds the official records for listed buildings, scheduled monuments, Registered Parks and Gardens, Registered Battlefields and Protected Wrecks.

2.3.2 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.

2.3.3 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" number. 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.

2.3.4 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.

2.3.5 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. Six-inch Ordnance Survey maps are reproduced courtesy of the National Library of Scotland.

3.   HERITAGE ASSET ASSESSMENT

3.1   *Known Archaeological and Historical Assets*

3.1.1 Introduction

Figure 2 should be viewed in conjunction with this text, which reviews the known archaeological and historical heritage assets within the PDA and wider study area. 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 and NHLE within the study area are contained within Appendices 1 and 2.

3.1.2 Prehistoric (before AD 43)

The HER data for the study area contains a single entry for the prehistoric period. A scatter of early Neolithic to late Bronze Age struck flint and fire fractured flint (HER 17121) was found to the east of Longspoon Wood, 400m north of the PDA (Hudspith 2000, 5–6).

3.1.3 Roman (AD 43–410)

The inferred course of a Roman road (HER 696) was suggested by the Viatores group aligned NW-SE, 400m to the west of the PDA (Viatores 1964, 201–202, 209).

3.1.4 Anglo-Saxon (410–1066)

No Anglo-Saxon heritage assets have yet been recorded within the study area. Studham is listed in Domesday Book in 1086 as *Estodham*. The name means 'Stud-homestead', that is associated with horse breeding (Mawer and Stenton 1926, 132). It was made up of two holdings (see below) amounting to 11 hides at the time of Domesday. It is likely that the settlement originated in at least the late Saxon period. There is no evidence at present for the location of this early settlement.

3.1.5 Medieval (1066–1550)

Two manors are mentioned in Domesday Book of 1086: the manor of Studham and the manor of Studham-cum-Barworth or Barwyth Manor, which was slightly smaller in size and held by the Priors of Dunstable (Page 1908). Both manors held ploughlands and woodland worth 100 pigs.

Studham Manor (HER 3131) was located at what is now Manor Farm, close to the parish church of St Mary the Virgin and 100m east of the PDA. The site is first recorded in historical records in the 13th century, when the moat was constructed by Walter, Lord of Studham. The moat seems to have been sub-circular or sub-oval in shape and the surviving part, east of the house, forms an angular crescent shape. A linear pond to the north of the moat and an irregular pond to the west of the farmyard do not appear to have had any connection to the moat.

The medieval parish church of St Mary the Virgin (NHLE 1159252, HER 1134) is located 40m to the north of the PDA and is Grade I listed. It stands within a churchyard (HER 8975) bordering the north side of the PDA. A document in the Diocesan archive at Lincoln records that the church and five altars therein and a large churchyard were dedicated in 1220. The earliest surviving fabric in the church is the nave arcades which date from the early 13th century, corresponding well with the date for the dedication in 1220. It is quite likely that the church built at this time replaced an earlier building.

The church and manor indicate the location of a probable focus of medieval settlement (HER 16961) forming a 'church end' to the village.

Two tracks located to the west of the PDA may have medieval origins. North-south aligned track (HER 10945) is located 270m to the west of the PDA and track (HER 10985) joins it at right angles from the west.

3.1.6 Post-medieval (1550–1900)

Within the PDA, close to the location of the present bungalow, is the former site of a pair of mid 18th-century cottages (HER 10918). These stood until at least the mid 20th-century, being replaced by the current building on the site.

The Manor House (NHLE 1321311, HER 6956) situated 100m east of the PDA is a Grade II listed building dating from the 17th century with 19th- and 20th-century additions.

Other post-medieval heritage assets within the study area are:
- Quarry (HER 10908) disused post-medieval quarry pit
- Quarry (HER 10912) disused post-medieval quarry pits
- Quarry (HER 10915) disused post-medieval quarry pits
- Building (HER 7882) Queen Anne Cottage, 19th-century cottage
- Building (HER 13428) Vicarage Cottage
- Earthwork enclosure (HER 10441), rectangular earthwork probably representing post-medieval property boundaries
- Woodland (11043), woodland recorded on post-medieval maps

Census data shows that the population of Studham gradually increased during the first half of the 19th century to a maximum of 668 in 1851. After this time the population gradually declined until the last decades of the century when the process accelerated, leaving only 317 in 1901. This forms part of a wider pattern of rural depopulation at this time; however, the collapse of the local straw plaiting industry probably played a part in the last quarter of the 19th century.

3.1.7 Modern (1900-present day)

No modern heritage assets are recorded within the PDA or the study area.

The population of Studham has increased from the mid-20th century onwards with the additional housing located in the area to the west of the crossroads at

the village centre. The area surrounding the PDA has been largely unaffected by modern development and remains rural in character.

3.2   Archaeological Events

This section provides details of previous archaeological events and interventions that are recorded within the study area in the HER. Only one event is recorded.

3.2.1   Manor Farm, Studham: Watching brief (EBD 782)

Archaeological monitoring was undertaken during building works at Manor Farm. Inside the building part of a north-south aligned flint wall was recorded when a concrete floor was removed. The wall had been subject to significant later disturbance. It was 0.45m wide and overlay a post-medieval make-up deposit which contained flint, chalk, tile and pottery. Some other sections of flint walls were recorded in section in foundation trenches next to the house. Artefacts recovered included a small amount of post-medieval pottery and fragments of peg tile.

3.3   Cartographic Evidence and Historic Landscape Character

This section contains a discussion of selected historical maps, illustrating the changes occurring on the site and in the general vicinity from the early 19th century onwards. Copies of the maps discussed below are bound towards the back of the report (Figures 4–10).

3.3.1   1811 untitled map of Studham (Figure 4)

At this time the PDA was occupied by an elongated, north-south aligned building on the Church Road frontage. This corresponds to a pair of 18th-century cottages (HER 10918). The south-west corner of these cottages was located approximately where the north-west corner of the present bungalow stands. A narrow north-south aligned plot is shown to the rear of the cottages. Beyond that an irregular-shaped field occupies the area to the south and west of the churchyard. Much of the southern part of this field is today occupied by the garden of the present bungalow.

The area to the north of the PDA is occupied by the churchyard (HER 8975) and remains unchanged.

On the opposite side of Church Road, to the east of the PDA, the present Manor Farm is shown as an H-shaped farmhouse within a D-shaped moat, presumed to be the site of the medieval manor of Studham (HER 3131). An elongated water feature to the north of the moat remains today. On the west side of the house was a large farmyard, enclosed by ranges of buildings on its north, south and west sides. The range to the west side is shown extending beyond the courtyard as far as the south-east corner of the churchyard.

3.3.2   1847 Church End Farm (Figure 5)

The cottages (HER 10918) in the PDA are shown divided into two main sections, corresponding to the two cottages known from later records. A small section at the north could represent a lean-to on the end of the building. The

cottages are clearly shown inside an elongated plot, contrasting with the earlier map in which they appear to stand in front of this plot.

Some changes and additional details are shown at Manor Farm. The moat is shown with a break in its eastern side. The farmyard and associated buildings show some changes. Two small buildings to the south of the farmyard are no longer shown and the area formerly enclosing them has been reshaped. The range along the northern side of the farmyard appears to have been rebuilt after 1811. In this map the yard appears a more regular rectangular shape due to the relocation of the north range which now has a central opening. The yard is shown with internal subdivisions. A small plot of land corresponding to the present location of the car park next to the church appears for the first time, as does a large irregular-shaped pond to the west of the farmyard.

3.3.3 1852 Tithe apportionment map (Figure 6)

This map shows very little change from the previous survey. It shows some additional detail in the farmyard and two more small rounded ponds, one located opposite the cottages and another at the south-east corner of the churchyard.

3.3.4 1885 1st edition 6-inch OS map (Figure 7)

The first edition Ordnance Survey map shows additional detail with dashed lines indicating paths and trees.

The arrangement of the cottages appears similar to that shown in previous maps. The southern part of the plot containing the cottages is shown as a separate section with trees.

The churchyard (HER 8975) is shown in detail with paths and access points on the south, north-west and east sides.

Manor Farm is named on this map and the main access is indicated leading to the south-east corner of the farmyard. The other details appear largely unaltered.

Church Road then, as now, was lined with trees and a square wood identified as Church Grove was situated to the south-west of the PDA.

3.3.5 1900 2nd edition 6-inch OS map (Figure 8)

This map shows no significant change from the previous map.

3.3.6 1926 3rd edition 6-inch OS map (Figure 9)

This map shows few changes from the previous map. The irregular-shaped field which now forms the western part of the PDA has been divided by this time to separate the two parts of the field to the south and west of the churchyard.

On the opposite side of Church Road the group of buildings previously called Manor Farm is labelled Church Farm. The map shows minor changes from

the earlier edition with the construction of a rectangular building within the farmyard.

3.3.7 1950 revised edition 6-inch OS map (Figure 10)

This map shows no significant changes from the previous edition. In the PDA the 18th-century cottages (HER 10918) are still standing within the same narrow garden plots shown in the 1880s.

3.4   Modern Land Use and 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).

The PDA is a residential site occupied by a single later 20th-century bungalow within a large garden plot (Figures 17, 18 and 19). The garden is mostly under grass with a small number of trees and shrubs. It lies adjacent to the south side of the churchyard which is defined by mature trees on the churchyard side of the boundary and a shallow ditch which runs along the north boundary of the PDA.

Planning permission (CB/14/04203/FULL) was granted in 2015 for a double garage and store to the rear of the plot occupied by the bungalow (Figure 20).

The area surrounding the PDA forms a rural setting within an undulating landscape that is characterised by open fields and small clumps of woodland.

The setting of the Church of St Mary the Virgin and the adjacent Studham Manor is still very much rural in character, despite the enlargement of Studham village further to the east. This rural agricultural and woodland setting is important for the experiencing and understanding of the character and function of the manorial site.

The area as seen from the churchyard includes views over the lower-lying land to the east with the village and Manor Farm visible from this side. Looking southwards from the church, the view is characterised by the enclosed nature of the approach to the church from this side along Church Road, which is lined on both sides by mature trees. The PDA is largely screened by large trees and two sheds on the south side of the churchyard (Figures 15 and 16).

To the west the PDA is largely screened from the site of Manor Farm by trees bordering the car park on this side.

3.5   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 are listed in Appendix 5.

3.5.1 Prehistoric (pre-43 BC)

The study area contains a single record relating to this period (HER 17721), a flint scatter of early Neolithic to late Bronze Age struck flint found 400m north of PDA. Based on the potential distribution of sites of this date and the limited extent of the PDA, the potential for prehistoric archaeological deposits on the PDA is considered to be *low*.

Remains of this period within the PDA, if present, are most likely to be represented by stray finds or isolated features. If any such remains were found on the PDA, they would probably be of *low* significance, depending on their exact nature.

3.5.2 Roman (43 BC–AD 410)

The study area contains a single record for this period (HER 696). This is a possible Roman road; its existence was suggested by the Viatores group based on the identification of linear earthworks. The potential for archaeological deposits of this date on the PDA is considered to be *low*.

If any assets were found within the PDA, they would most likely be stray artefacts and be of *low* significance, depending on their exact nature.

3.5.3 Anglo-Saxon to medieval (410–1550)

The PDA is situated close to: the medieval parish church (NHLE 1159252, HER 1134); the medieval churchyard (HER 8975); the site of a medieval manor house (HER 3131); and is located within a probable area of medieval settlement (HER 16961). The presence of human burials within the PDA cannot be ruled out because the churchyard boundary could have been moved in the past. The potential for archaeological deposits of this date to survive within the PDA is assessed as *moderate* to *high*.

The research framework for Bedfordshire states that, in general, few medieval rural settlements have been investigated in the county (Oake in Oake et al 2007). Oake states a need for research into rural settlement on a micro-scale of investigation, in order to establish the chronology, structure and function of individual settlements as well as classes of settlement, ranging from the prehistoric to the medieval period. The need for investigation into the origins, development and dynamics of medieval rural settlement are also emphasised by Medlycott (2011) in the East of England Research Framework. Depending on their nature and extent, remains of this period could be of *low* to *moderate* significance.

3.5.4 Post-medieval

The PDA contained 18th-century cottages (HER 10918) that were replaced by the present dwelling in the mid 20th-century. The potential for stray finds and archaeological deposits from this period is *moderate*. Remains from this period are likely to be of *low* significance.

3.5.5 Modern

The potential for heritage assets dating to the modern period is *negligible*.

4. IMPACT ASSESSMENT

4.1 The Proposed Development

It is proposed to demolish the existing bungalow and to erect a new bungalow in its place (Figures 19 and 20). The existing bungalow consists of a range parallel to Church Road and a range at the rear, forming an L-shaped plan. It is built from pre-fabricated panels.

The replacement building would be in the same position as the existing building. The proposed front elevation, facing Church Road, is very similar to the existing design. The proposed plan would be slightly larger, with an additional room added at the rear of the building in the angle of the existing L-shape plan. The overall size of the proposed building would be approximately 14m by 14m. The previously consented garage and store would lie within the curtilage of the proposed dwelling.

4.2 Direct Impacts on Heritage Assets

There is variable potential by period for the survival of below-ground heritage assets on the PDA (Table 1). The significance of assets that might survive is generally assessed as *low* to *moderate*. Groundworks associated with the proposed development could potentially adversely affect any such heritage assets.

The construction of the existing bungalow and the previous cottages on the site is likely to have had a negative impact on earlier archaeological deposits if any are present. Despite these possible impacts, experience from investigations on other previously developed sites shows that archaeological remains can survive between more recent intrusions.

The impact on potential below-ground assets is, therefore, assessed as *low* to *moderate*, depending on the precise nature of both the remains and the particular groundworks that affect them.

If required by the LPA, any direct impact of the proposed development on potential buried archaeological remains could be mitigated by measures to investigate and record the presence/absence, nature and significance of the potential archaeological assets. This could be achieved by a programme of archaeological works prior to or during development.

4.3 Direct Impacts on the Setting of Heritage Assets

The PDA is located close to the Grade I (St Mary's Church) and the Grade II (Manor Farm) listed buildings. Both of these represent significant heritage assets.

The significance of the setting of the two buildings is largely determined by their historic inter-relationship, with the moated manorial centre located adjacent to the medieval parish church.

The current visual setting of Manor Farm is characterised by openness to the east where it overlooks lower land and a closed aspect to the west where dense trees and a modern building screen it from Church Road.

The character of the setting of the church is formed by a number of factors: its rural character; the open views to the east; its elevated position above the village; and the approach from a road enclosed by trees. The setting is important to the experience of people both using the church and the footpath that crosses the churchyard.

The proposed development is a replacement for an existing building. The design retains the layout of the existing frontage. A small extension at the rear of the building fits into the existing footprint in a way that will result in no additional visual impact.

To the south, mature trees in the churchyard boundary provide the backdrop to the church and churchyard (Figures 15 and 16). The trees break up the view on this side with the result that the existing white bungalow in the PDA is inconspicuous viewed from the churchyard. To the west of the PDA a dense row of trees on the western boundary of Manor Farm forms a visual barrier between the planned development and the listed building of Manor Farm (Figures 13 and 14).

Even taking into account the previously consented garage and store, the proposed development would have *negligible* impact on the setting of the extant heritage assets in the vicinity. The significance of this impact would be no more than *neutral / slight*.

4.4 Summary

The following table summarises the known and potential heritage assets **within the PDA**. 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.

Period	Potential of finding heritage asset on PDA	Significance	Potential impact	Significance of potential impact (before mitigation)
Prehistoric (pre-43 BC)	Low	Low	Low	Slight
Roman (43 BC–AD 410	Low	Low	Low	Slight
Anglo-Saxon to medieval (410–1550)	Moderate to high	Low to moderate	Low to moderate	Moderate
Post-medieval (1550–1900)	Moderate	Low	Low to moderate	Slight

Period	Potential of finding heritage asset on PDA	Significance	Potential impact	Significance of potential impact (before mitigation)
Modern (1900–present)	Negligible	Negligible	Negligible	Neutral
Setting	n/a	n/a	Negligible	Neutral / slight

Table 1: Potential, significance and impact summary for heritage assets

4.5 *Confidence Rating for the Current Study*

As a general rule, desk-based assessments cannot be used as a predictive tool for the precise location and characterisation of sub-surface archaeological deposits. The nature of desk-based studies means that they rely on artefacts being reported and logged in the HER and information from intrusive investigations in the vicinity of the subject site and the wider landscape.

This assessment carries a rating of reasonable confidence. However, the unpredictable nature and presence of sub-surface and, therefore, non-visible archaeological remains has to be borne in mind.

5. BIBLIOGRAPHY

Brown, N. and Glazebrook, J. 2000, Research and Archaeology: A Framework for the Eastern Counties – 2 Research Agenda and Strategy (East Anglian Archaeology Occasional Paper 8).

CBC 2012. *General Guidance for the Preparation of Archaeological Desk-based Assessments.* (V1 29th March 2012 HF)

CI*f*A (Chartered Institute *for* Archaeologists) 2014 *Standard and guidance for historic environment desk-based assessments*

DCLG 2012. *National Planning Policy Framework.*

English Heritage 2010. *The setting of heritage assets: English Heritage guidance.*

Hudspith, R. 2000, 'Field Survey', *South Midlands Archaeology* 30, 5-6

Mawer, A, and Stenton, F M. 1926, *The Place-Names of Bedfordshire and Huntingdonshire*, Cambridge University Press

Medlycott, M. 2011. *Research and Archaeology Revisited: a revised framework for the East of England.* EAA Occasional Paper 24.

Oake, M. 2007, 'Research Agenda and Strategy' in Oake *et al.* 2007, 7-18.

Oake, M., Luke, M., Dawson, M., Edgeworth, M. and Murphy, P. 2007, *Bedfordshire Archaeology. Research and Archaeology: Resource Assessment, Research Agenda and Strategy.* Bedfordshire Archaeology Monograph 9.

Page W. (ed) 1908. 'Parishes: Studham', in A History of the County of Hertford: Volume 2, ed. William Page (London, 1908), pp. 274-280 http://www.british-history.ac.uk/vch/herts/vol2/pp274-280 [accessed 10 February 2016].

Viatores 1964, *Roman roads in the South-East Midlands*

6. APPENDICES

6.1 Appendix 1 – Designated Heritage Assets within a 500m radius of the PDA

6.1.1 Listed Buildings

NHLE No.	Name	Description	Grade
1159252	CHURCH OF ST MARY	13th century parish church with early 19th century repairs and vestry. (HER 1134)	I
1321311	MANOR FARMHOUSE	Farmhouse, C17 and later. Irregular T-plan. Brick, some timber framing and old clay tile roof. (HER 6956)	II

6.2 Appendix 2 – Undesignated Heritage Assets within a 500m radius of the PDA

HER no.	Name	Description	Period
696	ROMAN ROAD (Viatores 169)	The suggested line of a Roman road which joins Icknield Way near Whipsnade, and runs via Gaddesden Row to Elstree.	Roman
1134	ST MARY'S Parish church	See listed buildings.	Medieval
3131	SITE OF MANOR HOUSE- Manor Farm	Medieval moated manor on site of present Manor Farm. Interior ground works on the Manor House revealed three sections of flint wall and part of a tiled surface.	Medieval
6956	MANOR FARMHOUSE	See listed buildings	Post-medieval
7882	QUEEN ANNE COTTAGE	C19 single storey cottage with C20 additions.	Post-medieval
8975	ST MARY'S PARISH CHURCHYARD	Parish churchyard founded 1220.	Medieval
10441	EARTHWORK Castle Grove	Rectangular earthwork probably representing property boundaries.	Post-medieval
10908	OLD QUARRY	Site of disused post-medieval quarry.	Post-medieval
10912	OLD QUARRIES	Site of disused post-medieval quarry pits.	Post-medieval
10915	OLD QUARRIES	Site of disused post-medieval quarry activity.	Post-medieval
10918	COTTAGES (site of)	Site of pair of demolished 18th century cottages.	Post-medieval
10945	OLD ROADWAY	Site of former medieval road and post-medieval chalk pit.	Medieval + Post-medieval
10985	OLD ROADWAY	Site of former road from Studham church to NE corner of Coney Hill Common.	Medieval to Post-medieval
11043	LONGSPOON WOOD	Area of woodland at least post-medieval in date.	Post-medieval
13428	VICARAGE COTTAGE Valley Road	A post-medieval vicarage in Studham.	Post-medieval

HER no.	Name	Description	Period
16961	MEDIEVAL SETTLEMENT Studham Church	A small medieval settlement at Studham Church.	Medieval
17721	FLINT SCATTER E of Longspoon Wood	A scatter of flints collected during field walking. Early Neolithic to late Bronze Age	Prehistoric

6.3 Appendix 3 – Events

HER no.	Name	Description
EBD782	MANOR FARM, STUDHAM: WATCHING BRIEF	Flint walls recorded beneath floors of present building during building work

6.4 Appendix 4 – Cartogaphic Sources

Source	Description	Reference
BLARS	1811 untitled map of Studham	BW984A
BLARS	1847 Church End Farm Studham	X303/4
BLARS	1852 Tithe Map	MAT 43/1
National Library of Scotland http://maps.nls.uk/geo/records/	1885 1st edition to 1950 revision 6-inch OS maps.	N/A

6.5 Appendix 5 – Significance and Impact Criteria

Significance	Definition
International or very high	A designated World Heritage Site or place of equivalent 'outstanding universal value' and international significance
Regional to national or high	Designated heritage assets (scheduled monuments, Grade I or Grade II* listed buildings, registered Park or Gardens or battlefields) of national significance. Or: Undesignated heritage assets and archaeological remains of potentially equivalent value. This includes assets which are: • rare in the heritage environment record or • are a good example of a type site or • have a high potential to add to regional and national research criteria
Local to district and/or regional or moderate	Designated heritage assets of regional significance (Grade II listed buildings, Conservation Areas, Registered Park or Garden or battlefield not associated with events of national significance). Or: Undesignated heritage assets and archaeological remains of potentially equivalent value. This includes assets which are: • more commonly found in the heritage environment record or • have particular regional associations or may have important associations on a local or parish level (e.g. they have meaning to local population or embody something of the special identity of a locality) • have moderate potential to add to local and regional research criteria

Significance	Definition
Local or low	Assets which are: • are relatively poorly preserved or • have limited significance on a local level • have a low potential to add to local and regional research criteria
Uncertain	Sites where there is evidence that a heritage asset may exist, but where there is insufficient information to determine its nature, extent and degree of survival given current knowledge (e.g. cropmarks untested by fieldwork or random finds spots).
Negligible	Where there is very authoritative evidence – usually backed up field evaluation – that there is no possibility that anything of archaeological or historical significance exists or where any potential surviving remains have no value within the context of the current study.

Magnitude of Impact	Effect of Impact
High	Causes total destruction of or permanent change to most key elements of the asset that results in major loss of integrity and reduction in significance. Substantial change to the setting of the asset. Any such change would almost certainly considerably reduce the significance of the asset and would not normally be reversible.
Moderate	Either: causes permanent change to or loss of many key elements of the asset that lead to a moderate loss of its overall integrity and reduction in significance. Moderate change to the setting of the asset. Or: temporarily causes major loss of integrity and significance, e.g. through restricting accessibility and visibility, or by altering its setting.
Low	Either: causes permanent change to some key or peripheral elements of the asset, or changes to the setting of the asset, that lead to a slight loss of its overall integrity or significance. Or: temporarily causes moderate loss of integrity and significance, e.g. through restricting accessibility and visibility, or by altering its setting.
Negligible	Minor permanent or temporary changes to the asset that have no appreciable direct or indirect effect on the asset or its setting and do not affect its significance.
No change	No change to the asset or its setting.

6.5.1 Significance of effects matrix

|		No change	Negligible	Low	Moderate	High
Value/Sensitivity	**Very high**	Neutral	Slight	Moderate /large	Large or Very Large	Very Large
	High	Neutral	Slight	Moderate	Moderate /large	Large or Very Large
	Moderate	Neutral	Neutral / slight	Slight	Moderate	Moderate / large
	Low	Neutral	Neutral / slight	Neutral / slight	Slight	Slight / moderate
	Negligible	Neutral	Neutral	Neutral / slight	Neutral / slight	Slight
		Magnitude of impact				
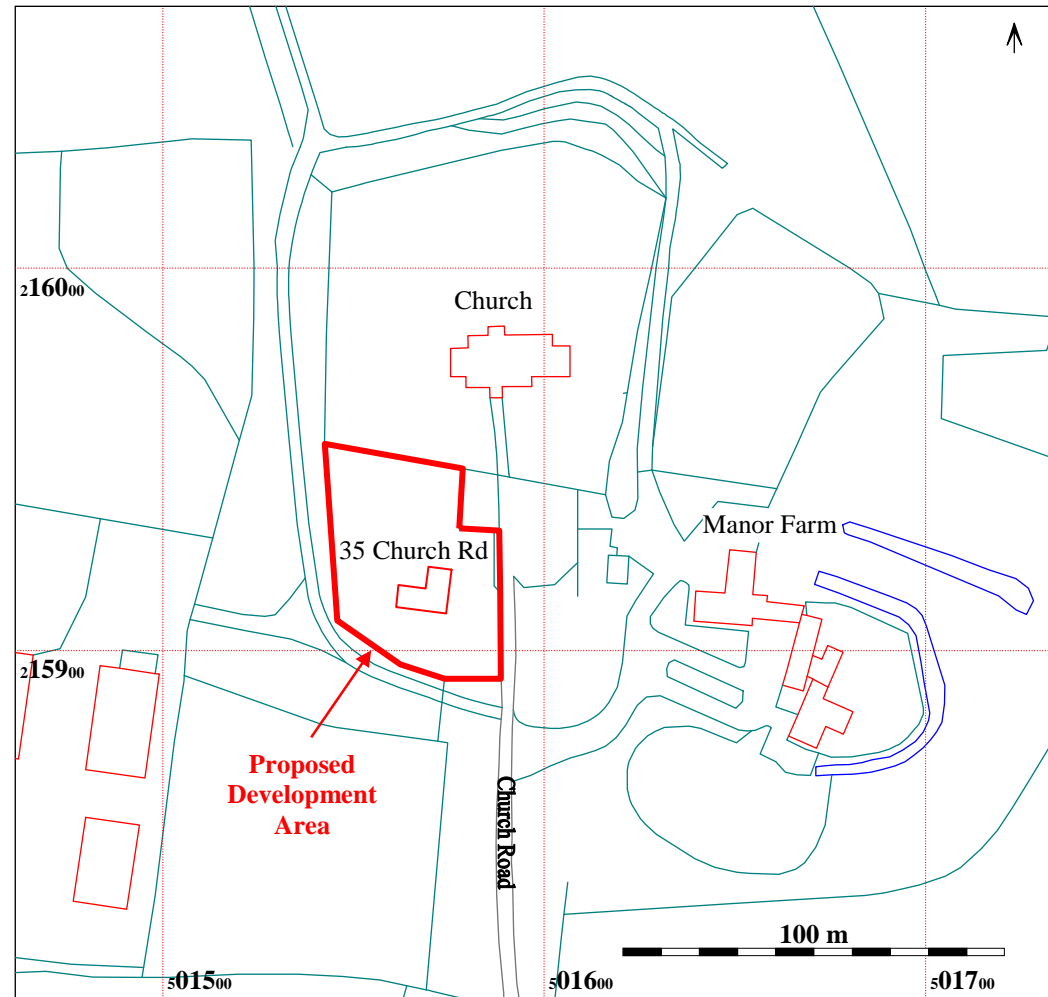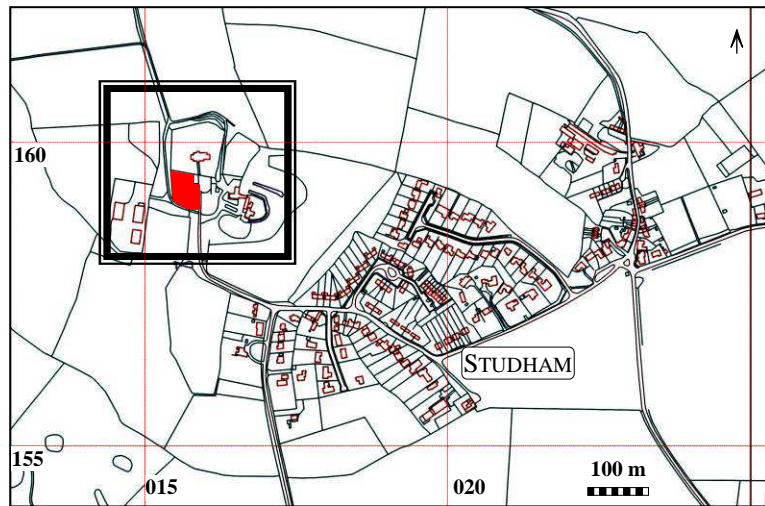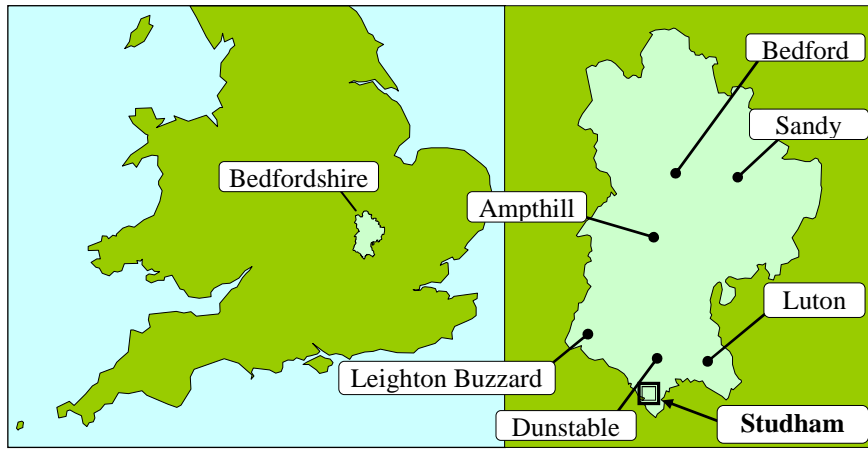
Figure 1: Site location

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright.
Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Central Bedfordshire Council. Licence No. 100049029 (2011)
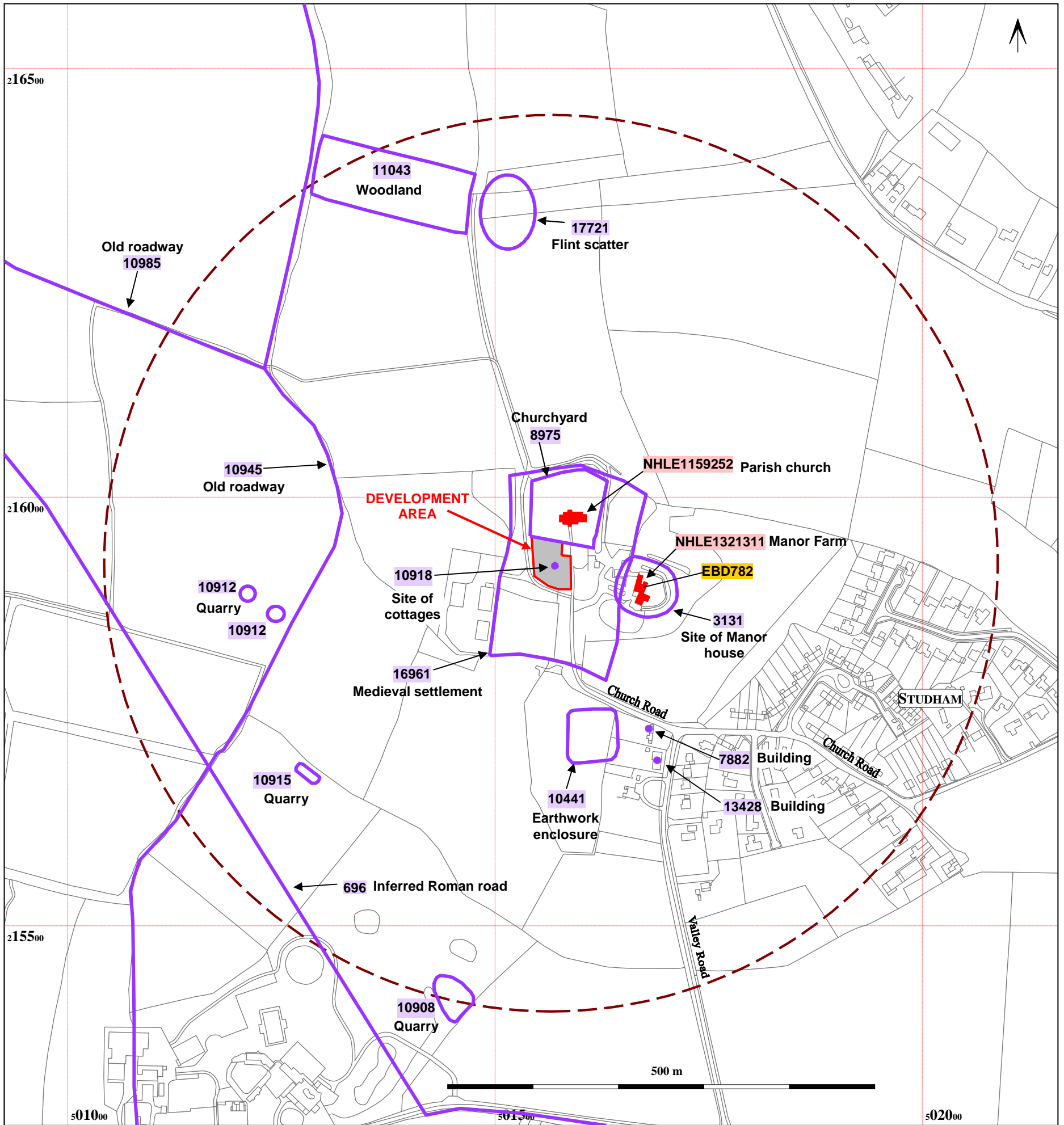
Figure 2: Heritage assets within 500m of the proposed development area

This map is based upon Ordnance Survey material with the permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Central Bedfordshire Council. Licence No. 100049029 (2011)
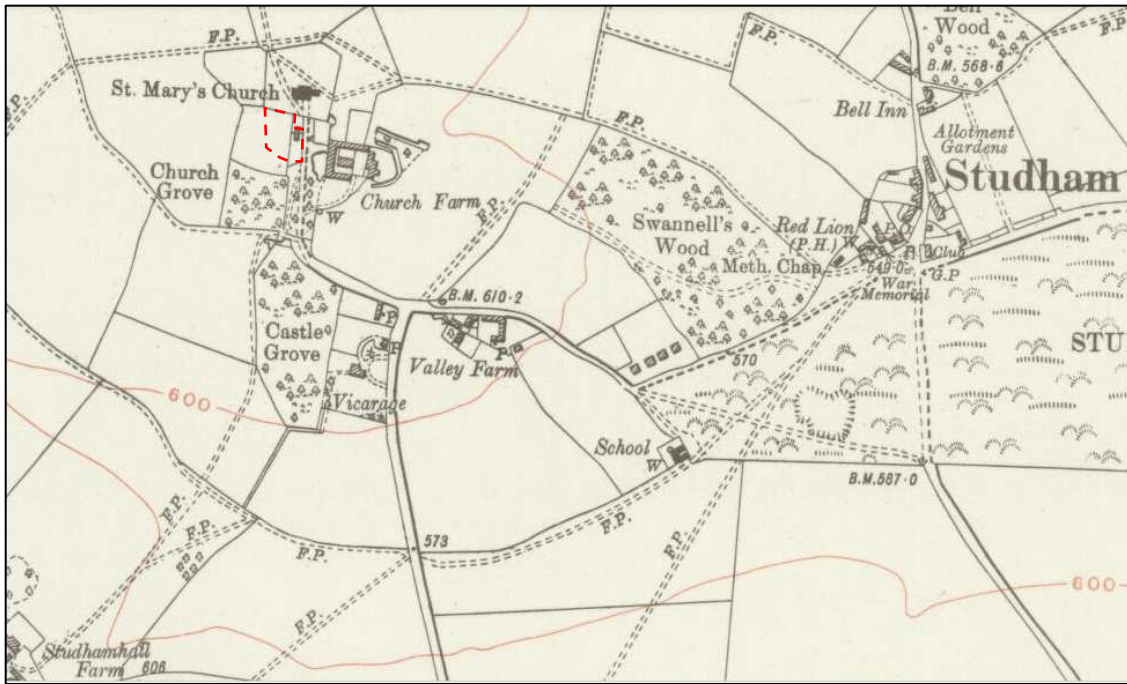
Figure 3: Overall plan of village in 1926

The plan shows the historic layout of the settlement, with a village core and a separate focus close to the church. The PDA is outlined in red. (source: National Library of Scotland)
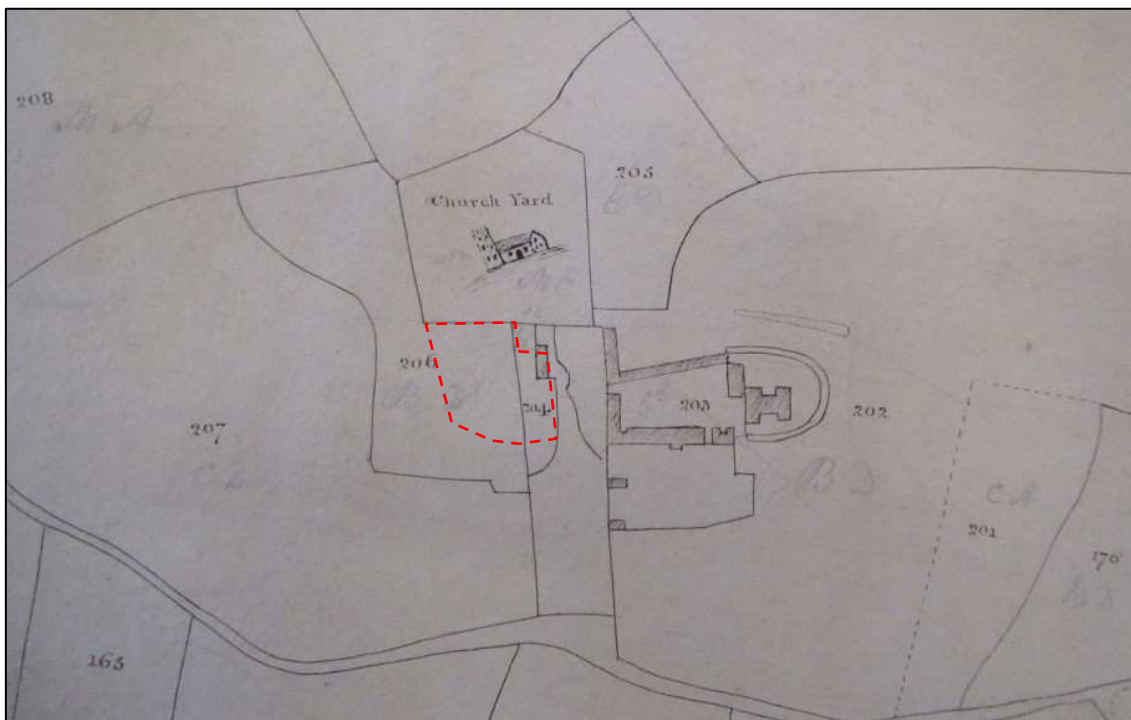
Figure 4: 1811 untitled map of Studham

PDA outlined in red (Bedfordshire and Luton Archives Service: BW984A)
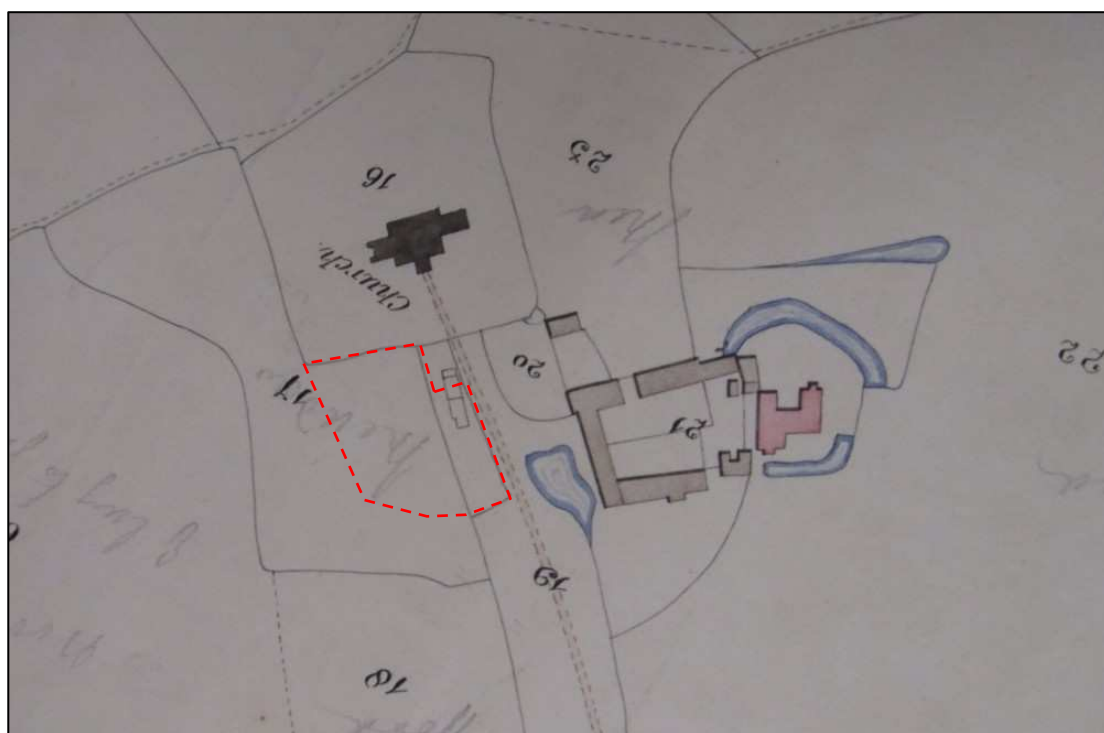
Figure 5: 1847 Church End Farm

PDA outlined in red (Bedfordshire and Luton Archives Service: X303/4)
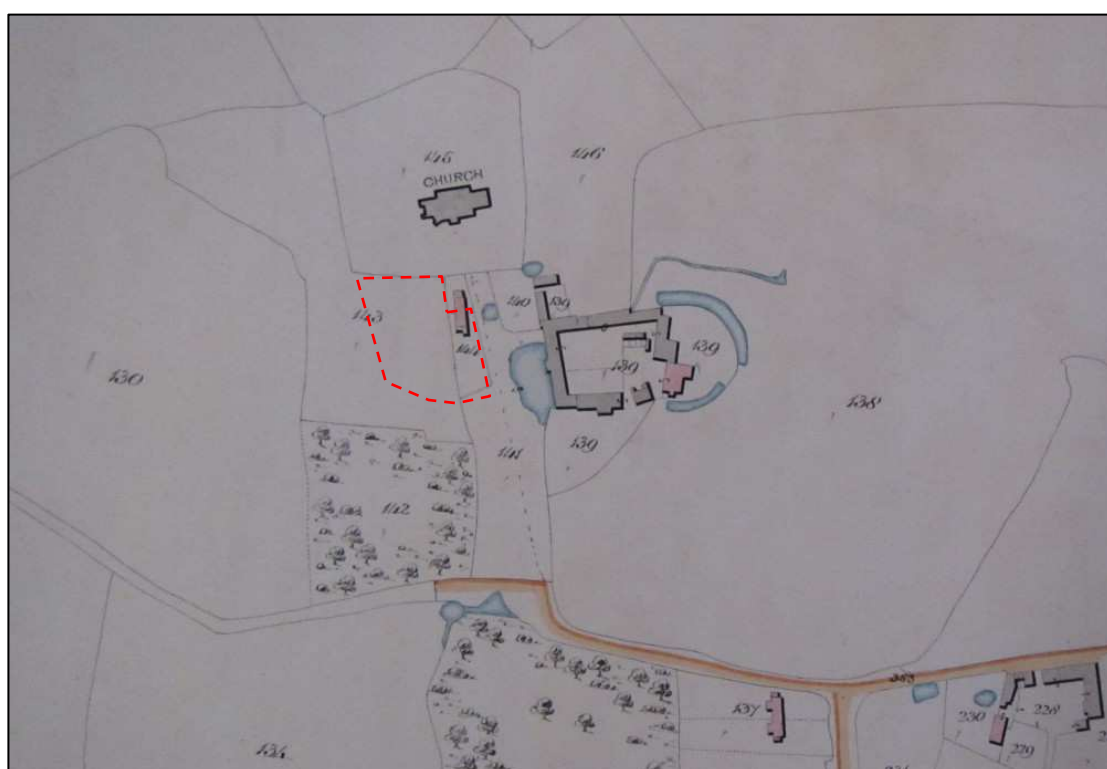
Figure 6: 1852 Tithe apportionment map

PDA outlined in red (Bedfordshire and Luton Archives Service: MAT 43/1)
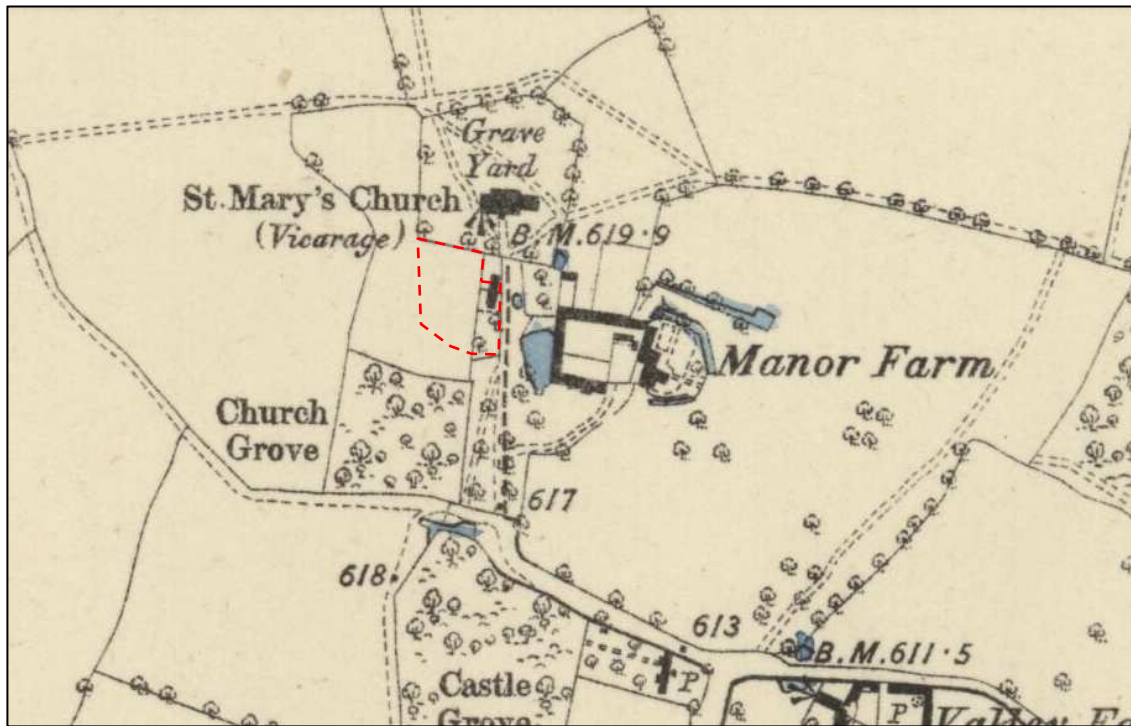
Figure 7: 1885 Ordnance Survey map
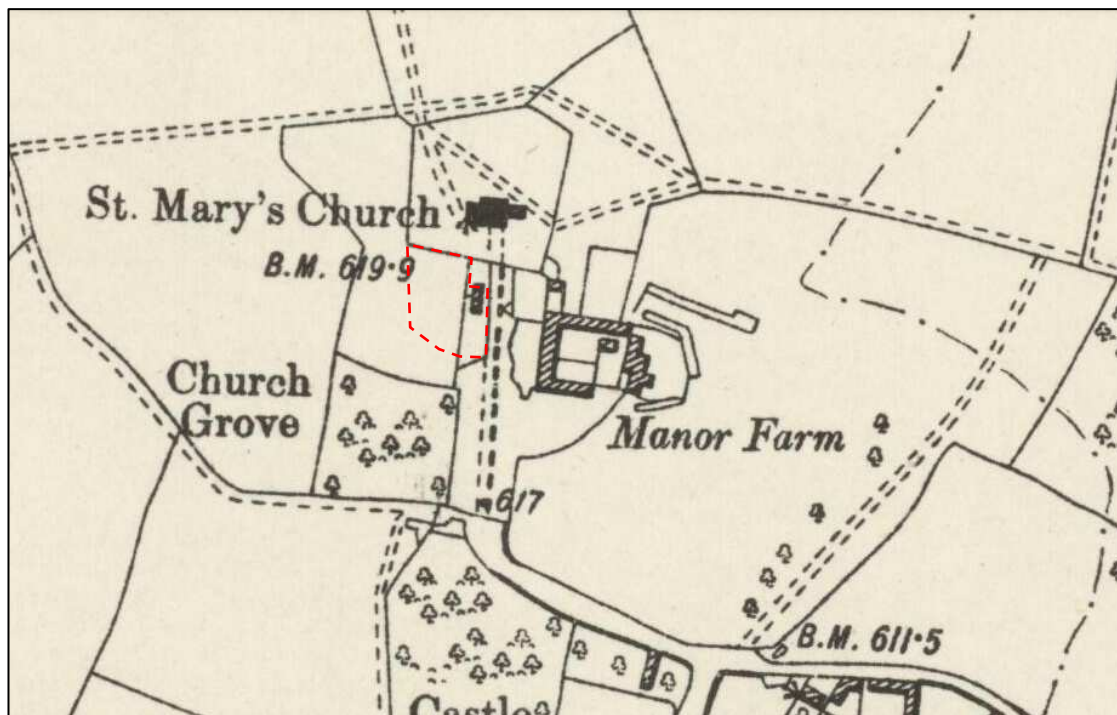
PDA outlined in red (source: National Library of Scotland)

Figure 8: 1900 Ordnance Survey map
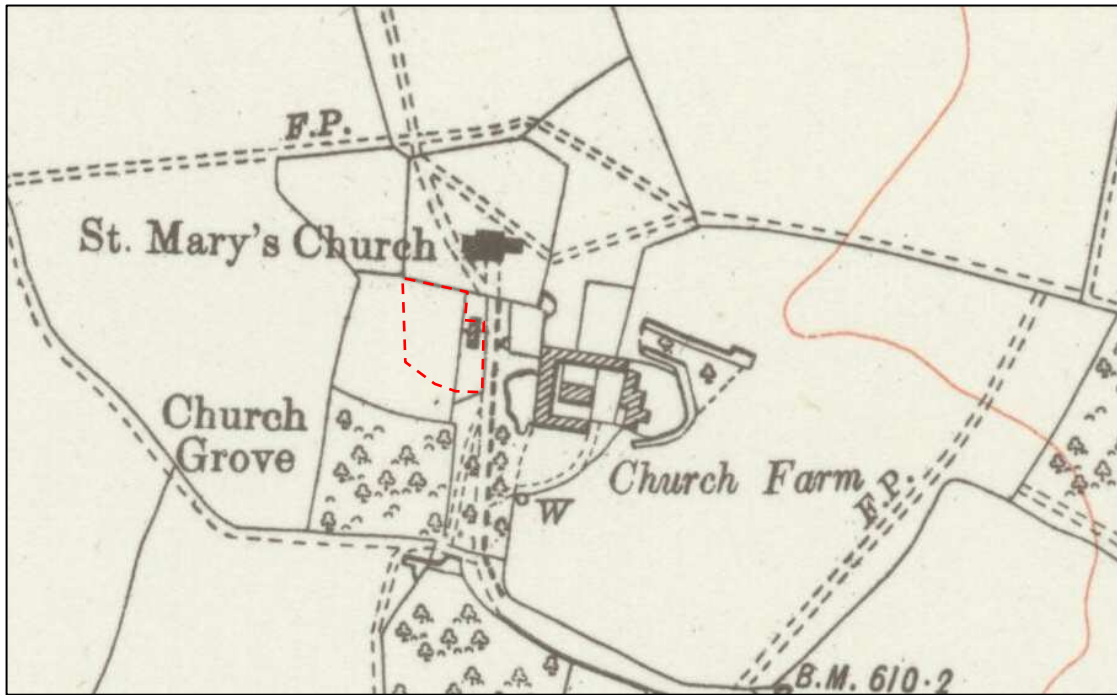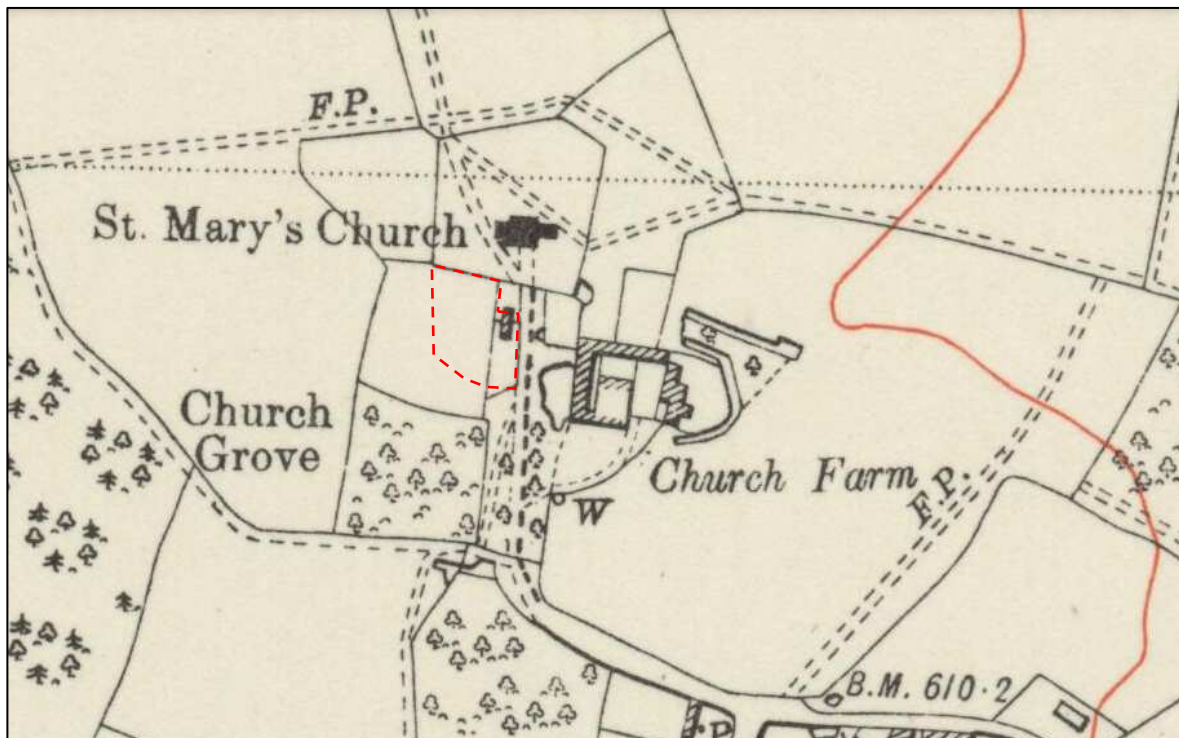
PDA outlined in red (source: National Library of Scotland)

Figure 9: 1926 Ordnance Survey map

PDA outlined in red (source: National Library of Scotland)

Figure 10: 1950 Ordnance Survey map

PDA outlined in red (The Source: National Library of Scotland)

Figure 11: No. 35 Church Road, facing east

Figure 12: Garden of 35 Church Road, facing north

(Location of planned garage near the yellowish shrubs)

Figure 13: Church Road, facing south

(35 Church Road is to the right; Manor Farm is behind the trees to the left of the image.)

Figure 14: Church Road, facing south-east

(Manor Farm is behind the trees in the centre of the image.)

Figure 15: Churchyard, facing south with PDA in background

(PDA is just visible through the trees, towards the right of the image.)

Figure 16: South boundary of churchyard, looking towards PDA

(The Bungalow is visible through the trees at the extreme left-hand side of the image)

Figure 17: Existing bungalow in the PDA, front elevation

(View showing the building from Church Road)

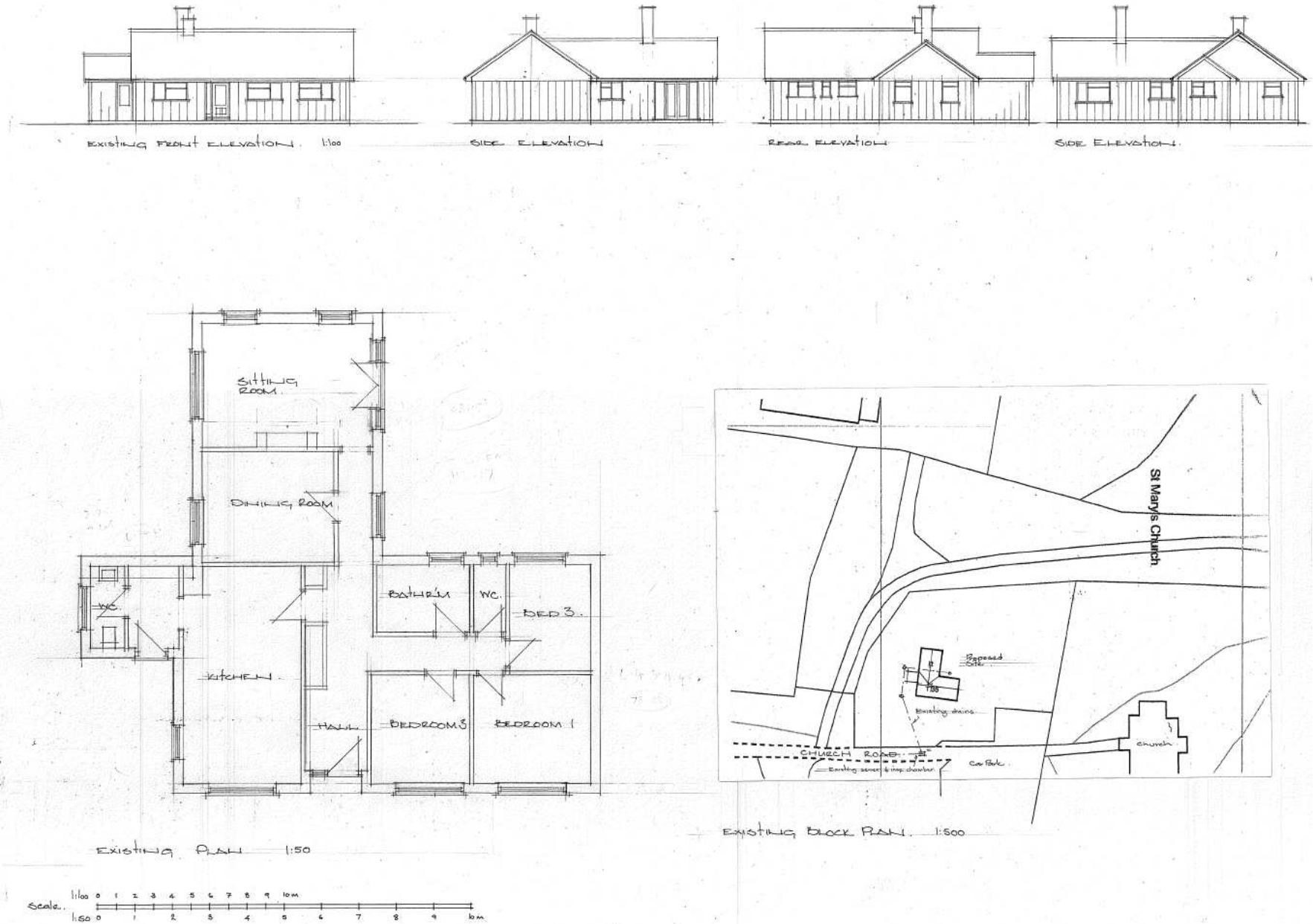**Figure 18:** Existing bungalow in the PDA, rear elevation

(Looking south-east)

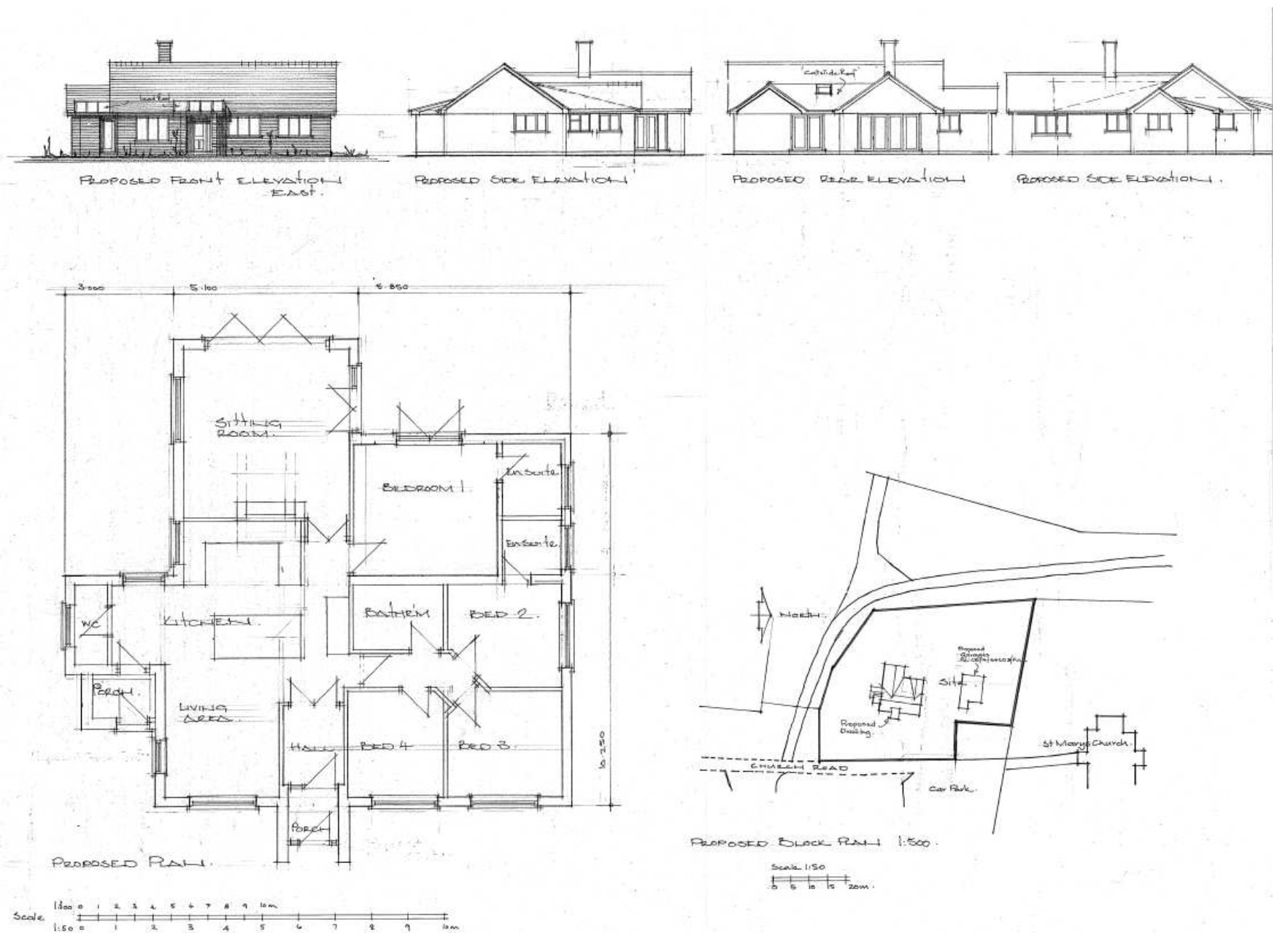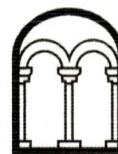**Figure 19:** Plan and elevations of existing building (John Edgell, Charter Building Surveyor)

Figure 20: Proposed plan and elevations of replacement building (John Edgell, Charter Building Surveyor)