



# Sudeley Castle Lost Gardens and Medieval Village

Updated Project Design 2025

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Stephanie N. Duensing

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## Purpose of document

This document has been prepared as an Updated Project Design for Sudeley Castle Estate and DigVentures' global community. The purpose of this document is to provide an outline of planned fieldwork, aims and objectives of the work, and methodology to be employed.

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## Project summary

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## Acknowledgements

We'd like to begin with a sincere thank you to the Sudeley Castle Estate for such an exciting commission, with particular thanks to Lady Elizabeth Ashcombe for making this project possible. We would also like to thank Stephen Torode, Derek Maddock, Jean Bray (previous Sudeley Castle archivist), Mary Powys, April Rose, Clive Bremner, Jane Clarke and all the lovely staff of Sudeley Castle Estate for their help and support. The project has also benefitted from the advice of Toby Catchpole, Gloucestershire County Council, Jo McAllister of Historic England and Stacey Melia of Natural England.

## Executive summary

This document is submitted in support of a research project at Sudeley Castle, carried out by DigVentures. The project fieldwork will take place between 20th October – 3rd November 2025 and will comprise a community-based archaeological investigation. The proposed work is funded through crowdfunding and will take place as outlined in this document. On this basis a MORPHE/PRINCE2 compliant document has been produced outlining key archaeological research questions, roles, procedures, stages and outputs. The overarching aim of this fieldwork is to provide baseline information to contribute to the future management, research and presentation of the site, creating multiple educational and participatory learning experiences for community participants. This will be achieved through a community-based archaeological research project designed to:

- Characterise the earthworks indicated in a previous topographical survey, geophysical survey and test pitting programme, refining the chronology and phasing of the site through a programme of evaluation trenching.
- Understand the site’s archaeological and palaeoenvironmental conditions.
- Demonstrate the potential of the archaeology to add insights to the search for evidence related to the early Medieval village of Sudeley.
- Create opportunities for communities to engage in archaeological research.

This Project Design provides an outline of methodology and planned intervention to complete:

**Targeted excavation** Three evaluation trenches are proposed for 2025 in the Sudeley Castle Gardens to the east of St Mary’s Church over an area of anomalies identified from topographical, satellite images of cropmarks and LiDAR surveys. This year’s excavation aims to further explore the evidence revealed in the 2024 season for medieval deposits possibly linked to the lost settlement of Sudeley survive in the northeast of Hop Field. LiDAR survey has shown possible burgage plots from earlier structures predating the construction of Sudeley Castle that will again be targeted.

**Public engagement** The project is supported by a comprehensive learning, engagement and activity plan which aims to both raise awareness to the site and provide tangible learning outcomes. An innovative digital recording system will be used to enable volunteers to record and publish on smartphones or tablets in the field; specifically developed learning materials will be used to deliver online events, with a dedicated project website, underpinned by a digital and audience building strategy, aiming to engage the local community and a global audience in the project.

Project background and research priorities	Detailed in Part 1 – this document
Methodology	Detailed in Part 2 – this document, with detailed method statement in Appendix 1
Relevant experience of project team	Detailed in Appendix 4
Organisational capability/quality assurance	Detailed in Part 2 See also ClfA RO reference (ID No. 102)

Table 1: Compliance matrix



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## 1 INTRODUCTION

### 1.1 Project summary

- 1.1.1 This document provides an Updated Project Design for delivery of Sudeley Castle Lost Gardens and Medieval Village Community Excavation. This document will define how DigVentures intends to deliver this phase of the project, and outlines how research aims and participation targets will be met. All DigVentures projects are managed according to the Historic England MoRPHE project model (Management of Archaeological Research Projects in the Historic Environment) – itself based on a PRINCE2 public sector project delivery framework.
- 1.1.2 The Project Design is presented in two parts; Part 1: Description of the project provides the project context, including a brief summary of proposed methodology, key sources and activities required to support the delivery of the proposal's outcomes. Part 2: Resources and programming identifies responsibilities of individual project staff members and outlines the tasks and programme.
- 1.1.3 The overarching aim of fieldwork is to provide baseline information to contribute to the future management, research and presentation of the site, creating multiple educational and participatory learning experiences for community participants. This will be achieved through a community-based archaeological research project designed to:
- Characterise the earthworks indicated in a previous topographical survey, geophysical survey and test pitting programme, refining the chronology and phasing of the site through a programme of evaluation trenching.
  - Understand the site's archaeological and palaeoenvironmental conditions.
  - Demonstrate the potential of the archaeology to add insights to the search for evidence related to the early Medieval village of Sudeley.
  - Create opportunities for people and communities to engage in archaeological research.

## Part 1: Description of the project

### 2 BACKGROUND

#### 2.1 Research context

- 2.1.1 Sudeley Castle stands at the base of the edge of the Cotswold limestone plateau, well-known as a very rich archaeological landscape (Figure 1). A large number of Neolithic long barrows are known from the surrounding region, such as Belas Knapp, worked flints were recovered from around Boilingwell and prehistoric pottery recorded at Stancombe Wood (GCCHER: 9104, 9108, 9133). Iron Age forts are known at Nottingham Hill, Spoonley Wood, Wadfield Farm, Winchcombe Secondary School and farmsteads at Almsbury, (GCCHER: 20493), while residual Romano-British material from a number of sites across Winchcombe indicates a wide spread of settlement (Cox 2014). A probable Romano-British villa with underlying Iron Age activity may also have been recorded during the pipeline scheme as it crossed Dunn’s Hill (GCCHER: 2178). Emma Dent also reports tesserae being found at ‘Sudeley Lanes Farm’, which could possibly be Sudeley Lawn Farm or Lanes Barn to the east of Sudeley Castle, and also at the lodge site further to the east, while a Roman tombstone or altar stone was recovered from Stancombe Wood and coins were found at various locations around the estate (Dent 1877, 15; GCCHER 2117).
- 2.1.2 In the mid-9th century, Sudeley was the property of King Ethelred. The estate was rich in oak trees and included a royal deer park. Unusually, the property was not confiscated after the Norman Conquest, but remained in the de Sudeley family, descendants of Ethelred.
- 2.1.3 Sudeley is mentioned in the Domesday book as being comprised of 40 households in 1086, making it in the top 20% of settlements recorded. These were made up of 18 villagers, 8 smallholders and 14 slaves (7 male and 7 female). These were all three subgroups among the peasantry indicating varying degrees of status. In economic terms, the villagers were indistinguishable from freemen. They were the most substantial group among the unfree peasantry, possessing on average 30 acres of land and two plough oxen. A smallholder, on average, possessed 5 acres of land and might have a share in the villagers' plough teams, though their holdings could be more meagre. Slaves were at the bottom of the economic and social scale, normally without resources of their own and there to perform their lord's bidding. The significant correlation between numbers of slaves and plough teams on the lord's home farm (demesne) has been taken to prove that they were often utilised by the lord as his ploughmen ([Hull Domesday Project](#): accessed August 2024).
- 2.1.4 According to the Domesday book, in addition to three woodlands, there was enough land to be ploughed by 17 plough teams. Since the standard Domesday plough team was drawn by eight oxen, this represents about 136 oxen. There were also six mills, which along with plough teams represent the two major sources of economic resource and power at this time. All of this was valued at two pounds 12 shillings in the money of the day, comparable to the annual wages of a skilled labourer in 1270 (source: [National Archives currency converter](#)). Value of land and currency was highly unstable in the 11th century, but it would have been a considerable holding for the time.

- 2.1.5 Although a castle is documented at Sudeley from 1139, architectural analysis of the surviving structure has suggested that the earliest standing elements date to the fifteenth century. The castle is recorded in relation to a number of conflict events during the 'Anarchy' period, apparently as a wider hub of engagements in and around the town of Winchcombe, including Hailes and Postlip.
- 2.1.6 In 1441, Ralph Boteler (d 1473), Admiral of the Fleet, was created Baron Sudeley. His projects included the rebuilding of the Castle and the construction of St Mary's chapel, the Banqueting Hall, the Great Barn, and the Portmare Tower. Following Lancaster's defeat in the Wars of the Roses, in 1469 Boteler was forced to sell the Castle to Edward IV.
- 2.1.7 In terms of Late Medieval archaeological evidence, there are 15th century structural remains at Sudeley Castle, the nearby 'Grange' building (Ellis 2008, 88) and the buildings at the 'St Kenelm's Well' complex (SP 0431 2770), which includes the nearby remains of a medieval chapel incorporated into a 19th century house (GCCHER: 2170).
- 2.1.8 Architecturally there is no known fabric at Sudeley Castle that pre-dates the 15th century, and extensive remodelling of the complex in the post-medieval period means that an assessment of the castle's original form and date cannot be ascertained. John Leland who visited Sudeley in 1542 indicated the presence of a manor house at the site of the Castle and that 'the platte is yet seene in Sudeley Parke where it stode' (Dent 1877, p.58). Emma Dent, who lived at Sudeley Castle, indicated that the location of the possible manor house was potentially known, stating that the 'spot where the Manor-House once stood (as named by Leland) has always been traditionally indicated in the raised broken ground in the field called the Hop-yard, and is distinctly visible from the East Terrace' (1877, p.59). Emma Dent claimed that there was 'a tournament or tilting ground in the vicinity of the Olde Manor House measuring about sixty by forty pace's (ibid p.77).
- 2.1.9 The Gloucestershire Sites and Monuments Record indicates that there was a Manor House present in the area from the Saxon period through to the reign of King Stephen in the 12th century, which is thought to have been located in a field called the Hop-Yard, beyond the east terrace of Sudeley Castle (GCCHER: 2169). This location was investigated by Emma Dent, resident of the Castle during the latter part of the 19th century. Dent combined history, historiography and antiquarian investigation in her work on the Castle and Winchcombe, the Annals of Winchcombe and Sudeley (1877). As part of this, Dent aimed to locate the site of the Manor House that Leland reported seeing. To this end, Dent funded an investigation in 1875, comprising a 'cutting' made to the east of Sudeley Castle 5 under the supervision of Canon Lyson. The excavations recorded the foundations of houses, roads and walls that were interpreted as 'Saxon' in date (Dent 1877, 59, 77). Dent states that 'as the houses of the gentry up to this time and to a much later period, were built chiefly of wood we were not surprised when excavating, in the summer of 1875; the traditional site of the ancient Manor-House to find only debris of foundations and walls' (1877, p.77). Derek Maddock (current Sudeley Castle Archivist) considers that there is no other evidence for the location of the Manor House other than Dent's work (pers comm). The HER records that the feature published as Manor House (site of) is a 1.6m high irregular shaped mound, grass covered and tree planted and may represent a spoil heap from Lyson's excavations.

- 2.1.10 Jean Bray (previous Sudeley Castle archivist) has indicated that Emma Dent was reputedly looking for the remains of a Saxon Palace/Manor House which may have been the residence of Goda the daughter of Æthelred. Emma interpreted the high-status architecture which was purportedly discovered during the 1875 excavation as belonging to this Anglo Saxon residence (pers comm). This interpretation is what was subsequently recorded on the 25" 1st edition Ordnance Survey map of 1884, presumably as a result of Dent's work. Unfortunately, perhaps as a result of having had an operation in April of the same year, there is no reference to the Hopfield / Hop Yard excavation in Dent's 1875 personal diary, despite various comments concerning Roman digs at Wadfield, Humblebee and Spoonley in previous years (Derek Maddock pers comm). There is an archive of artefacts which relate to Emma Dent, presumably objects she collected from the estate, although none appear to have been recovered during the 1875 excavations. There are a number of clay pipe fragments, the earliest of which are Elizabethan, and some stone implements found from the upper slopes of Humblebee, Belas Knap and Farmcote (Derek Maddock pers comm).
- 2.1.11 Areas of earthwork remains of medieval ridge and furrow are visible in the area around Sudeley Castle. Although the remains of a reputed deserted medieval settlement and Manor House have been supposedly identified to the east of the castle, this interpretation has been challenged by the suggestion that some of these elements may relate to formal gardens connected to the castle (GCCHER: 2169).
- 2.1.12 Leland notes that Winchcombe Abbey formerly held the hillfort at Towbury Hill, identifying it as a castle with double ditches and formerly held by King Offa or Kenulph, although there is no evidence of medieval occupation (Toulmin Smith 1909, 135). It remains possible that references to a castle at Winchcombe may relate to the fortification at Sudeley due to the site's proximity to the town. The extensive park at Sudeley was extant by the 16th century, and the alignment and some of the fabric of the inner park wall may be medieval in origin (GCCHER: 2175), and while the fabric of the outer park wall is probably late post medieval in date, it may too follow a medieval predecessor.
- 2.1.13 Major rebuilding programmes began at the castle under Ralph Boteler in the 15th century, and the church or chapel of St Mary was also constructed or rebuilt at this time (Dent 1877, 118-9), while the 'Tithe Barn' west of the castle also dates architecturally to this century. Leland makes specific reference to the rebuilding of Sudeley Castle by the Boteler, but that it was subsequently seized by Edward IV when the loyalties of the family were suspect (Dent 1877, 136; Toulmin Smith 1908, 55-6), then passing to Richard III upon his ascent to the throne and eventually passing to Henry VII upon his defeat of Richard III at Bosworth in 1485. Sudeley Castle stayed in the crown's possession until after the death of Henry VIII in 1547.
- 2.1.14 The castle subsequently became home to the Seymour family. Henry VIII's final wife, Catherine Parr, having married Thomas Seymour following the king's death in 1547, moved to Sudeley in 1548. Records from the Seymour accounts indicate a considerable sum was spent in advance of her arrival at Sudeley. Her time there was short lived and she was buried in the Church of St Mary in Sudeley in 1548 after her death as a result of complications from childbirth. The future Elizabeth I and Lady Jane Grey also briefly stayed at the castle during this time. Under Queen Mary the castle would pass to John Brydges, 1st Baron Chandos.

- 2.1.15 During the reign of Elizabeth I it was his grandson Giles the 3rd Lord Chandos who entertained the Queen on three occasions. The first visit was in August or September 1574 in her progress westward to Longleat, Bristol and Wilton. The second visit was in 1575 on her way to Woodstock. It was between the second and third visits that the country was threatened by the Spanish Armada. Lord Chandos was appointed to collect an army to defend the young trees of the Forest of Dean. Perhaps in recognition of this the Queen visited again in 1592 after the defeat of the Armada (Derek Maddock pers comm). A spectacular three-day feast was held to celebrate the anniversary of the defeat of the Spanish Armada in 1592 (Kolkovich, E. 2016. pp. 73-8). The Queen was welcomed on Saturday with a pageant, especially written for the occasion, followed by bear and bull baiting, mummers, jousts and feasting (Derek Maddock pers comm). On Sunday there was dancing and a specially written play was performed. The High Constable of Cotswold should have been presented the next day but it was too wet. The three-day party has been described as one of the longest in history (Derek Maddock, pers comm). Elizabeth I was in her eighties when she came to Sudeley in 1592. The celebratory banquet is likely to have been a small select affair involving the local aristocracy in a banqueting house. There are no references to the types of garden used for the party events other than a single mention that they are in a garden (Brydges 1815).
- 2.1.16 In the English Civil War, the castle was subject to two major sieges and left ruined in the aftermath. In 1649 Sudeley was slighted by Cromwell's forces. Huge fines were paid and carpenters and stone masons were brought in from the Forest of Dean and removed the wood and stone. The house was systematically dismantled and the stone banqueting house ruined. (Derek Maddock pers comm).
- 2.1.17 The castle was left to ruin until it was purchased in the 1830 by the Dent family who set about the renovation of buildings and gardens, and was later developed as a heritage attraction in the later 20th century (GCCHER: 13732). The area north-west of the castle was utilised as a prisoner-of-war camp during the Second World War (GCCHER: 22898). The title of 'Lord Sudeley' was also revived in the 19th century, but the family seat was established at nearby Toddington Hall.

## 2.2 Previous excavation or archaeological works

- 2.2.1 There is very little early cartographic material for Sudeley or Winchcombe, and even the available tithe mapping lacks information for much of the area. A key feature depicted on early 1st edition 25" maps is an antiquarian identification of the 'Manor House (Site of)' in a square earthwork feature in a field to the east of Sudeley Castle. Analysis of available LiDAR data gives a clear impression of the level of archaeological earthwork preservation in the vicinity of the castle. This includes a range of enclosure forms to the east and south of the castle. There are also surviving fragments of ridge and furrow cultivation, including sections of at least three adjacent furlongs to the east of the castle. A map held by Gloucestershire County Council Archaeology Service depicts Sudeley Castle in 2004 and suggests evidence of buildings in Hop Field, although the lack of a key means it is unclear as to the meaning of other map symbols.
- 2.2.2 During 2014, the University of Exeter carried out an extensive topographical and geophysical survey (Fradley et al 2014). This revealed many anomalies suggestive of successive phases of activity. The topographical survey indicates that the overall level of preservation of archaeological earthworks at Sudeley Castle is excellent, in part a

result of its use as a parkland landscape and an extended period of abandonment as a high-status residence between the 17th and 19th centuries. The key areas of activity can be seen to the east and south-east of the surviving castle structure. The large field to the east of the castle contains the most complete and intricate earthwork complex surveyed, although elements of these complexes continued into the field to the south.

- 2.2.3 Magnetometer survey of the environs of Sudeley Castle identified several additional features of archaeological interest. To the east of the castle the results of the survey were surprisingly limited given the extent of archaeological earthwork preservation. The dominant feature is the extensive linear anomaly running primarily east-west across the site which is iron pipework from the Sudeley Castle water management system. Across the rest of the field a small number of linear features toward the south-eastern corner of the surveyed area correspond with earthwork features recorded as part of the topographical survey.
- 2.2.4 Earthworks comprising a network of formal gardens on the eastern side of the castle and continuing around its southern and possibly its western face remain. The clearest evidence is visible set within a large rectangular enclosure on the eastern side of the castle, which have previously been misinterpreted as medieval settlement earthworks (Ellis 2008, 88; GCCHER: 2169), with evidence of a range of sub-divisions into trackways and rectangular garden beds. Excavations by Emma Dent in the 19th century identified the foundation walls of a masonry structure within the north-eastern mound which she interpreted as 'Saxon'.
- 2.2.5 The form of these gardens is comparable with other examples dated to the 16th or early 17th century, as can be seen in many of the examples recorded by Atkyns (1712). The documented conflict at Sudeley in the 1640s and slighted by Cromwell in 1649 provides a highly probable date for when these gardens were abandoned. The form of this garden layout subsequently influenced the form of the gardens laid out when Sudeley Castle was re-established as an elite residence in the 19th century. The Church of St Mary was 'restored' in the 19th century, but dates originally to the 15th century, and like the adjacent castle very little is known about its earlier history. It appears that any rural medieval settlement that existed in the vicinity of the church may have been cleared ahead of the development of this garden system. In the 20th century along the length of the balustrade at the boundary of the Queen's Garden two extensive trenches were excavated previously with a gap of 2m between to bury an architectural artwork. All the ground was found to be disturbed behind the balustrade filled with Cotswold limestone fragments. This area was probably made ground relating to the construction of the later garden (Peter May, Groundsman, pers comm).
- 2.2.6 The surveys have indicated that Sudeley Castle was largely remodelled during the 15th and 16th century, leaving few details of its form in the 12th century. Although some possible areas of high potential for future research have been identified which aim to evaluate both the survival and significance of archaeology relating to the development of the Tudor gardens and banqueting house and the contribution that its archaeological evidence could provide to a broader understanding of the landscape, historical and cultural context concerning the creation of these types of gardens (Section 4). The scale and quality of archaeological preservation in the vicinity of the castle is otherwise excellent and contains a range of evidence from the Neolithic through to the present.

## 2.3 Location, topography and geology

2.3.1 Sudeley Castle is situated on the east side of River Isbourne, a north-flowing tributary of the Warwickshire River Avon in the Cotswolds approximately one mile east of Winchcombe and eight miles northeast of Cheltenham, Gloucestershire, England (Figure 1). Located on the western side of the limestone Cotswold escarpment, the site has only received limited archaeological investigation, despite now functioning as a heritage attraction. Sudeley Castle stands in an area of Charmouth Mudstone Formation of the Early Jurassic epoch, in the valley of the Beersmoor Brook, a tributary of the River Isbourne, as it cuts through the limestone, mudstone and siltstone of the Cotswold plateau.

## 3 RESULTS OF PREVIOUS SEASONS

### 3.1 2018 Test pits

3.1.1 A test pitting exercise was undertaken by DigVentures with community participants in October 2018. Five test pits were excavated in the Sudeley Castle Gardens to the east of St Mary's Church and over an area of earthworks including a rectangular enclosure believed to relate to a Tudor Garden and a banqueting house (Figure 2). The aim was to characterise the structures, recover potential dating evidence relating to their different phases of use and to assess the archaeological survival of the Tudor Garden and banqueting hall (Noon et al 2018). The fieldwork established the depth of archaeological remains buried across the site.

- Test pit 1 was positioned over the top of a linear earthwork possibly representing the northern walkway around the Tudor Garden and on top of a linear geophysical anomaly (on a different alignment) that may be an old water pipe to supply the castle.
- Test pit 2 was positioned over the mound in the northeast corner of the garden, labelled on early maps as the site of a Manor House.
- Test pit 3 was positioned over a large mound adjacent to existing castle garden that may once have been a centrepiece to the original garden possibly a water feature.
- Test pit 4 was positioned to investigate earthworks in the middle of the field that were potentially garden features and to see if there was any masonry associated with them.
- Test pit 5 was positioned over the possible site of a Manor House.

3.1.2 The test pit results broadly correspond with the results of the earthwork and magnetometry survey (Fradley et al 2014), confirming the existence of a raised platform and possible garden features likely to relate to an earlier Tudor Garden and a raised mound that was believed to potentially relate to a banqueting house.

3.1.3 Test pit 1 was dug to a depth of 0.48m and revealed a raised bank likely to relate to the northern walkway around the Tudor Garden platform but a possible water pipe was not located. It contained finds of animal bone, tile, a nail, three dressed stones and a stone with traces of mortar, all consistent with general gardening activities located on and around the platform.

3.1.4 Test pit 2 was dug to a depth of 0.94m and revealed a raised bank with a line of stones observed in the section that were roughly dressed. The fill was very mixed indicating

that it was either a constructed mound believed to potentially relate to the site of a banqueting house or backfill from a previous excavation interpreted as medieval settlement earthworks and Manor House (GCCHER: 2169, Dent 1877, 59, 77). This interpretation was changed after results of 2021 fieldwork.

- 3.1.5 Test pit 3 was dug to a depth of 0.48m and revealed layers of clay probably relating to the construction of a mound that may have been a centrepiece to the original garden, but a possible water fountain was not located.
- 3.1.6 Test pit 4 was dug to a depth of 0.38m and revealed layers of silty clay with evidence of disturbance probably relating to the construction of garden features with associated masonry comprising several flat stones in the northeast corner that may have been deliberately placed. Finds of an animal tooth, flint, clay pipe and two fragments of nails were not related to any particular features and are consistent with generalized garden activity.
- 3.1.7 Test pit 5 was dug to a depth of 0.56m and revealed a raised bank believed to be a constructed mound either relating to the site of a Manor House or banqueting house.

## 3.2 2019 Excavation

3.2.1 Two trenches were excavated in 2019, situated to the east of St Mary's Church and over an area of earthworks including a rectangular enclosure presumed to likely relate to a Tudor Garden and a banqueting house (Figure 2). The aim of the fieldwork was to characterise the structures, recover potential dating evidence relating to their different phases of use and to assess the archaeological survival of the Tudor Garden and banqueting house (Noon et al 2019).

- Trench 6 was located to investigate a raised platform and possible garden features likely to relate to an earlier Tudor Garden.
- Trench 7 was located to investigate a raised mound thought to relate to a banqueting house.

3.2.2 Trench 6 revealed an outer bank probably functioning as a walkway and an inner bank surrounded by puddle clay lined water filled ditches functioning as a centre piece and probably a very grand water feature such as a fountain been fed by a well. Similar garden layouts have a central water feature or fountain such as Kennilworth (Paula Henderson pers comm).

3.2.3 Trench 7 revealed that the mound in the northeast corner was made up of a raised platform with two structural walls and a possible floor with a possible contemporary drain. The walls were interpreted as a building structure. The walls went through a process of collapse which was then robbed out by an antiquarian excavation in 1877 by Canon Lyson funded by Emma Dent. These trenches appear to have removed approximately half of the mound which is likely to now be backfill from Canon Lyson's excavations with the remains of a Tudor raised garden platform and possible banqueting house constructed on top. Based on the 2019 excavations the platform and what was believed to be building remains looked like it fit the classic profile for a banqueting house with hardcore to build up the mound with a clay capping and a small building often 9m x 6m which would comfortably sit on the platform (Paula Henderson pers comm), however, following 2021 fieldwork this interpretation was changed and is discussed below.

3.2.4 The Tudor Garden went into a disuse phase after 1649 when the castle was slighted by Cromwell's forces and was then abandoned with the land given over to agricultural activities until it was purchased in the 1830 by the Dent family who set about the renovation of buildings and gardens. During this renovation material was dumped in the upper fills of the ditches Trench 6 mainly comprising of greenhouse with material continuing to be dumped until 1941 representing convenient levelling activity in the hollows of the ditch. The material finds indicated that the site has been disturbed over time both through the development of the site as a Tudor Garden extension with later agricultural activity and dumping episodes particularly a 19th century greenhouse and including material from renovation activity from 1830.

### 3.3 2021 Excavations

3.3.1 Four trenches were excavated in 2021, situated to the east of St Mary's Church and over an area of earthworks including a rectangular enclosure believed to relate to a Tudor Garden and a banqueting house (Figure 2). The aim of the fieldwork was to characterise the structures, recover potential dating evidence relating to their different phases of use and to assess the archaeological remains of the Tudor Garden and banqueting house (Noon & Casswell 2020, Jago et al. 2022).

- Trench 8 reopened the eastern end of Trench 7 and extended north, east and south to understand the deposits surrounding the wall identified in 2019.
- Trench 9 was located over a linear earthwork that was initially interpreted as being a walkway between twin banqueting halls.
- Trench 10 was a 3 x 2m test pit excavated approximately 8m north of Trench 8 and investigated the edge of the mound.
- Trench 11 was a test pit located approximately 15m south of Trench 8 and targeted the continuation of the wall (F801) to the south of Trench 8.

3.3.2 Trench 8 revealed a greater length of the wall (F801) identified in Trench 7 during the 2019 season. No further evidence was found within Trench 8 to suggest a floor surface either side of the wall, the interpretation of the wall forming part of a banqueting house has been discarded. The wall was re-interpreted as a garden boundary wall, demarking the edge of a Tudor formal garden. The wall was demolished and covered when the garden was converted to a wilding or water garden in a later Tudor period. The north extension of Trench 8 revealed evidence of Victorian trenches.

3.3.3 Trench 9 demonstrated that the mound it targeted was constructed in a single phase, and the material used was sourced from one location. It is possible that the material was sourced from a feature to the east that may have been a pond. There was a lens of gravel underneath the topsoil which may have been the walkway.

3.3.4 Trench 10 found more evidence supporting Victorian remodelling and disturbance in the mound. A cast iron drainpipe, and the surface of a Victorian trackway were identified.

3.3.5 The addition of Trench 11 and probing with a road iron has provided a good understanding of the position and extent of the wall (F801) and aided in its re-interpreted as a garden wall.

### 3.4 2022 Excavations

3.4.1 Four trenches were excavated in 2022, situated to the east of St Mary’s Church and over an area of earthworks including a sub-circular area believed to relate to a Tudor Garden and a possible central viewing platform or associated with a central water feature (Figure 2). The aim of the fieldwork was to characterise the elements and features of the garden, recover potential dating evidence relating to their different phases of use and to assess the archaeological remains of the Tudor Garden (Jago et al. 2022).

- Trench 12 (20m x 10m) was positioned to target a raised anomaly which has been interpreted from the LiDAR as being associated with a central water feature or other viewing platform. The trench included the centre of this feature and parts of the anomalies that appeared to radiate from this feature.
- Trench 13 (16m x 5m) was positioned to target a possible water channel linking the presumed ponds to the east with the formal garden.
- Trench 14 (10m x 2m) was placed to investigate the presumed pond.
- Trench 15 was a contingency trench (2m x 2m) and investigated the continuation of the earlier Tudor garden wall originally encountered in Trenches 7 and 8.
- Earth resistance survey of 1.3Ha over the south end of Hopfield was also undertaken.

3.4.2 Trench 12 opened a large area to the west of the earlier boundary wall to understand some of the interior deposits within the bounds of the formal garden space. The trench was originally proposed to measure 20m x 10m but was reduced due to tree canopy and accessibility to be 20 x 7m on the NW end. The mound itself (F1202) was investigated with an L-shaped intervention and showed that it was built from a deposit of moderately compact clayey silt with frequent limestone pieces throughout, (12007), placed on top of the natural geology. No foundation cut for the mound (F1202) or the stone rubble (F1201) were observed. There were two tree bowl cuts which were excavated to the north of the mound, F1203 and F1204. Along the western break of slope of the mound was a rubble layer with highly organic deposits which were thought to possibly be an earlier garden path (F1205) around the base of the mound (F1202).

3.4.3 Trench 13 was a 16 x 5m and was positioned to target a possible water channel leading from large depressions to the east of the earlier garden wall (F801), which are thought to be fishponds. Very little depth was excavated across the northwest and southeast portions of the trench, the topsoil (13001) was removed to expose the continuation of wall (F801) in the NW corner of the trench, which was context (13008) in this trench. Additional probing with road irons suggest that the wall probably continues at least five metres further south of Trench 13, where it is then truncated by the ditch (F1301). As was seen in Trench 8 in 2021, there were large dressed and carved stone fragments contained within the clay mound material covering over the wall (F801) in this location as well. A large ditch (F1301) was encountered running at a SE-NW alignment which corresponds to the LIDAR and connects to the possible fishponds to the east of the formal garden. Excavations confirmed this was a ditch of considerable depth, reaching 1.49m below current ground level at its deepest point.

3.4.4 A Victorian drainage cut, F1302, truncated the earlier ditch, F1301. At the base of the Victorian cut, a horseshoe terracotta drain pipe SF82 was recovered. The Victorian land management excavations removed part of the wall rubble which was seen to

slump into the earlier ditch fill, likely remains of the removed section of (F801) during the renovations to the garden covering the earlier wall. This was then backfilled with a dense capping clay deposit (13016). This further reinforces that the original function of the depression was to channel water towards the formal garden, and the later Victorian actions were an attempt to reclaim the landscape and prevent water ingress.

- 3.4.5 Trench 14 was located in a low lying point to the east in Hop-yard field in what was thought to be possible fishponds, and it was intended to confirm this hypothesis. Several layers of silty clay were identified (14002), (14003), and (14004) - the distinction in colour between them was highly diffused, which supports an interpretation that the area was silted up gradually over time. The water table was reached at approximately 1m below ground level within the low lying area (nearly 2m below the ground level in Trench 13). Only 19th century finds were recovered from the upper contexts.
- 3.4.6 Trench 15 was a small 2m x 2m test pit excavated by hand approximately 12.5m south of where F801 exited the Limit of Excavation (LOE) in Trench 13 to the south. Wall F1501 was present in the trench and is almost certainly the continuation of F801, but probing indicated it abruptly stops just slightly south of this last trench LOE. Including all aspects of the wall which were excavated in the previous field seasons, this gives an overall length of over 60m to this earlier garden wall.

### 3.5 2023 Excavations

- 3.5.1 Three trenches were excavated in 2023, situated to the east of St Mary's Church and over an area of earthworks including a sub-circular area believed to relate to the Tudor Garden and a possible central water feature and other anomalies seen on topographical and geophysical surveys and LiDAR thought to be a viewing platform, path or other elements associated with the earlier garden design (Figure 2). The aim of the fieldwork was to characterise the elements and features of the garden, recover potential dating evidence relating to their different phases of use and to assess the archaeological remains of the Tudor Garden (Duensing 2023).

- Trench 16 (29m x 10m) was positioned to target an anomaly which has been interpreted from the LiDAR as being a possible garden path, raised feature and plant beds.
- Trench 17 (20m x 6m) was positioned to re-target a possible water feature and more fully understand remaining questions surrounding its use.
- Trench 18 (25m x 4m) investigated anomalies which had been interpreted from the LiDAR as being a possible garden path and plant beds.

### 3.6 2024 Excavations

- 3.6.1 Five trenches were excavated in 2024, to explore LiDAR anomalies and cropmarks visible in recent satellite imagery of the Tudor garden thought to relate to earlier phases of use of the area situated to the east of St Mary's Church. Interest was in over an area of earthworks and other anomalies seen on topographical and geophysical surveys and LiDAR. These were thought to be a building platform or other elements associated with an earlier medieval settlement known to have existed in the area that predated the castle's construction. The aim of the fieldwork was to characterise any structural elements and features, recover potential dating evidence relating to their

different phases of use and to assess the archaeological remains of any medieval activities (Duensing 2024).

- Trench 19 (15m x 7.5m) was positioned to target a possible garden structure seen as cropmarks in satellite images in an attempt to refine our understanding of the use and chronology of the garden and explore what structural elements might have existed in the space.
- Trench 20 (15m x 7.5m) was positioned to target a possible garden feature seen as cropmarks in satellite images to more fully understand remaining questions surrounding the garden's layout and design, and refine the understanding of the use and chronology of the garden.
- Trench 21 (20m x 5m) investigated linear and sub-rectangular anomalies interpreted from the LiDAR as being a possible burgage plot from Medieval houses along the main road into Winchcombe.
- Trench 22 (12m x 5m) also investigated a linear anomaly which was interpreted from the LiDAR as being a possible burgage plot from Medieval houses along the main road into Winchcombe.
- Trench 23 (5m x 5m) explored LiDAR anomalies and topographical targets associated with a possible burgage plot from Medieval houses along the main road into Winchcombe, nearest to existing street and fence.

- 3.6.2 Trench 19 was abandoned as in the excavation of it we appeared to hit an underground spring which flooded the trench and made it unviable to pursue.
- 3.6.3 Trench 20 initially resulted in what we thought was a blank trench, but upon closer inspection of sections in the location of the very strong crop mark locations, very ephemeral traces of what appeared to be ditch fill variation could be seen approximately 0.3m below current ground level. This soil change was so faint it was not visible during machining. This final trench in the garden space has achieved what the other seasons could not, which is to establish the depth of the original Tudor garden survival and to demonstrate that there were ornamental plantings in this space.
- 3.6.4 Trench 21 almost immediately revealed the remains of a semi-circular stone built feature with a more rough stone wall adjoining it on the eastern side running out of the limit of excavation toward Trench 22. These features were surrounded by a very large amount of 13th-century pottery.
- 3.6.5 Trench 22 also revealed the remains of a rough stone wall which ran on an E-W alignment, and was also surrounded by a very large amount of 13th-century pottery, primarily to the north of the wall, towards the road. These two trenches aligned with the southern aspect of the possible burgage plot and appears to confirm settlement which pre-dates the construction of the castle in this location.
- 3.6.6 Trench 23 was a hand excavated contingency trench which was located nearer the road to see if any building remains could be identified on the northern aspect of the possible burgage plot platform. Due to the manual excavation techniques, this area was not excavated as deeply, but evidence of 13th-century pottery was also found in this location, although no archaeological features were encountered.

### 3.7 2025 Fieldwork proposals

3.7.1 Building on the existing body of knowledge, combined with results from the various phases of fieldwork and investigation described above, proposals for fieldwork will involve a range of techniques including archaeological excavation to reopen two trenches to further characterise features discovered in the previous 2024 field season revealing 13th-century archaeological features.

- Trench 21 (12m x 14m) will continue to investigate linear and semi-circular stone features which have been interpreted as being part of a store and boundary wall for a possible burgage plot belonging to a Medieval houses along the main road into Winchcombe.
- Trench 22 (12m x 14m) will also continue to investigate a rough stone wall which has been interpreted as being a possible continuation of the boundary wall for a burgage plot from a Medieval house along the main road into Winchcombe.
- Trench 23 (5m x 12m) will extend the hand-excavated contingency trench which was left incomplete in the 2024 field season due to time constraints.
- A contingency test pit (5m x 5m) will further investigate LiDAR anomalies and topographical targets associated with another possible burgage plot from Medieval houses along the main road into Winchcombe, nearest to existing street and fence.

Proposals for the Stage 18 community excavation, outlined in detail below, will add further detail to that information, explore the buried archaeological sequence further and record the immediate environs of the monument.

## 4 RESEARCH AIMS AND OBJECTIVES

### 4.1 Project model

4.1.1 The overarching aim of the archaeological research is to define and characterise the physical extent of the earlier Tudor Gardens and to assess the potential for evidence of an earlier medieval village to survive in Hop Field, through a program of evaluation trenches in order to obtain baseline data that will facilitate its future management, presentation and enjoyment. Four key research aims were identified with a series of objectives which would facilitate evaluation of the survival and significance of archaeology relating to the location, development, settlement and disuse of the earlier medieval village of Sudeley. In addition, research aims to understand the potential for extant archaeology to provide a broad understanding of the landscape, historical and cultural context concerning these types of settlements. Our fifth aim articulated the project's ambition to embed community training and participation at its centre. The aims and objectives presented below provided the research and engagement framework for the 2024 archaeological investigations.

### 4.2 Aims and objectives

4.2.1 The overarching aim of the project was to define and characterize the physical extent of the site through a programme of non-intrusive and obtrusive investigation to obtain baseline data that will facilitate its future management.

4.2.2 Aim 1 – Define and establish the physical extent and character of the Medieval settlement and earlier archaeological evidence across the site through non-intrusive survey. This aim was built on previous topographical and geophysical survey work, LiDAR and cropmark data overlays combined with historical archival work in order to establish the possible location of earlier medieval structural evidence along the road to the north of the site. The area along the road further south in Hop Field is obscured by overburden consistent with the disuse of the gardens post-1649 and the utilisation of that area for agricultural purposes up to 1830.

- Q1: Can the layout of the site and associated sub-surface archaeology be established from previous remote survey?
- Q2: Can we identify any phasing in the topographic, remote sensing anomalies indicative of an extended period of use?

4.2.3 Aim 2 – In the light of the evidence base collated for Aim 1, this aim will be addressed with a programme of targeted evaluation trenches designed to ‘ground-truth’ the results of remote sensing and metric survey:

- Q3: What is the landscape setting and character of the area in Hop Field prior to the construction of Sudeley Castle Estate, and did this shape its design and development?
- Q4: Do any archaeological remains at the site survive pre-dating the Castle, and what is the potential of this area to inform a greater understanding of the landscape context including its relationship to an deserted medieval village (or structures) and other deserted medieval village sites?
- Q5: Can we refine the chronological narrative for the site, including the presence of earlier and later features, as defined in Aim 1?
- Q6: Can we understand the date, form and motivation for the desertion of any potential earlier structures?
- Q7: Building on previous work undertaken, can we build an understanding of the historical and cultural context of the medieval village or wider settlement?

4.2.4 Aim 3 – To understand the site’s archaeological and palaeoenvironmental conditions. This aim comprises the assessment of archaeological finds and samples recovered during excavations, using appropriate palaeoenvironmental and archaeological techniques to establish preservation and significance.

- Q8: What is the current state of the archaeological and palaeoenvironmental material across the site?
- Q9: How well do deposits and artefacts survive, and how deeply are they buried?
- Q10: What is the range and spatial patterning of artefacts recovered from the medieval occupation area, and can this inform our understanding of the use of the landscape and utilisation of wider resources?
- Q11: Can we increase our understanding of the earlier features and environment of the medieval settlement or any earlier phases of land use in Hop Field?

4.2.5 Aim 4 – Making recommendations, undertaking analysis and publication. This aim will require all data from Aims 1-3 to be collated, with an integrated analysis of the archaeological and palaeoenvironmental resource at Sudeley Castle Estate making recommendations to conserve, enhance and interpret the heritage significance of the site.

- Q12: What can an integrated synthesis of the results of this work with previous studies of contemporary regional sites tell us about the site and its setting?
- Q13: What recommendations can be made to protect, conserve and enhance the site?

4.2.6 Aim 5 – Creating opportunities for people and communities. In addition to the archaeological research of the project, achieving public engagement and benefits for the local community members, school children and visitors to the area to get involved and learn more about the archaeology of Sudeley Castle Estate have been key targets embedded within this project.

4.2.7 As part of the overarching project, providing opportunities for volunteers is an important component of the defined aims. Key objectives include:

- Engaging volunteers in undertaking archaeological investigation and delivering educational activities.
- Training volunteers in archaeological fieldwork, incorporating workshops and masterclasses, and provide training in digital recording techniques.
- Providing access to the site via daily guided tours around the archaeological trenches to introduce the importance of the site to Sudeley Castle visitors.
- Co-producing a digital archive and resource for the project website with community participants.
- Creating and broadcasting social media updates about the archaeology and our finds so everyone can follow the excavations as they progress.
- Hosting one live virtual tour to be later disseminated on DigVentures YouTube channel
- Hosting an additional in-person site tour for Sudeley Castle and Garden staff and volunteers, should they wish.

## 5 BUSINESS CASE

### 5.1 SHAPE Sub-programme

5.1.1 In addition to the business case articulated in the previously cited documents (and in particular, see Driscoll 2016, Section 4.9), the project accords with priorities articulated in Historic England’s Action Plan 2015-18 (informing Heritage 2020, the successor to the National Heritage Protection Plan), detailing how heritage organisations will work together to benefit the historic environment. In addition to these priorities, the project drivers can also be articulated in accordance with the fundamental principles of SHAPE (Strategic framework for the Historic Environment Activities and Programmes in Historic England, 2008).

5.1.2 In line with Historic England working practice and the fundamental principles of SHAPE (Strategic framework for the Historic Environment Activities and Programmes in Historic England, 2008) to understand, manage, and promote archaeology, the project has a primary driver (SHAPE sub-programme number 11111.130) in addition to other research outcomes that will address other Historic England and sector priorities, delivering significant value added benefit.

5.1.3 The main aim of the project is therefore to increase our understanding of the character of the site:

- SHAPE sub-programme number 11111.130: development of a sound evidence base for specific locales and historic assets in order to ensure appropriate management information is available and effective communication possible to community.
- 5.1.4 This research also has the potential to generate insight and recommendations with a local and national applicability, assisting the Client and Statutory Stakeholders in establishing best practice conservation and management measures.
  - SHAPE sub-programme number 31521.110: building heritage issues into wider change-management considerations, taking account of conservation principles and heritage legislation whilst efficiently reducing management burden for given areas.
- 5.1.5 As a consequence of the innovative digital and cross-platform approach, there is a significant ‘value added’ dimension to this project:
  - SHAPE sub-programme number 12212.110: developing wider understanding of the value of the historic environment; enhancing lifelong learning, encouraging support and enthusiasm for all aspects of heritage whilst contributing to quality of life.
  - SHAPE sub-programme number 51311.110: increasing public awareness, building direct support and engaging enthusiasm from which multiple benefits flow; encouraging knowledge transfer through enjoyment.
  - SHAPE sub-programme number 51332.110: high-profile outreach hitting potentially millions of people. Targeted to raise key issues or encourage wider understanding.

## 5.2 Historic England Research Agenda

- 5.2.1 The project has been designed in accordance with priorities articulated in the Historic England Research Strategy (2017) and the updated Historic England Corporate Plan (2023-26). The Research Strategy defines nine broad themes that describe Historic England’s research interests to ensure that any proposed work is aligned with HE’s priorities and values. Sudeley Castle Community Excavation Project drivers can therefore be articulated within the core priorities of **Better Places** (heritage helping improve civic pride, prosperity, wellbeing and opportunity for the people and places in most need of support). As a consequence of the innovative digital and multi-partner collaborative approach, there is a significant ‘value added’ dimension to this project, encompassing research themes including **Inclusive Opportunities** (everyone can connect with, enjoy, and benefit from the historic environment); **Planning, Listing, Conservation, Advice And Investment** (secure positive change and sustainable futures for historic places through expertise, advice, and investment); **Climate Action** (ensuring that heritage plays an important role in the fight to limit climate change impacts); **Stewardship of the National Collections** (effective management of collections resulting in a sustainable future); **Developing Historic England** (valued, adaptable, and equipped to deliver on HE strategy). All of these areas are in alignment with the research framework and methodology employed for this project.

## 5.3 Research framework

- 5.3.1 The archaeology of medieval period settlement sites features substantially within the South West Archaeological Research Framework (SWARF, Grove and Croft 2012). Key

themes identified in the SWARF include Public Interest (Aim 4), Transitions (Aim 10) Past Environments (Aim 21), Settlement (Aim 36) and Production and Trade (Aim 42 and 47). The following key aims are taken from the South West Archaeological Research Framework Research Agenda (<https://researchframeworks.org/swarf/a-research-agenda-for-archaeology-in-south-west-england/#section-1>).

- 5.3.2 Research Aim 4: Encourage wide involvement in archaeological research and present modern accounts of the past to the public.
- 5.3.3 Research Aim 10: Address our lack of understanding of key transitional periods. In particular, aim 10f: There is much more work to be done on the diagnostic material culture of the transition from the early to later Medieval periods, particularly pottery. The EH/MPRG strategy similarly highlights the dearth of good contextual material to help understand the transition from the Medieval to Post-Medieval tradition. At both transitional periods there are radical changes in type and technologies but we do not understand the detail of these changes, let alone what they mean.
- 5.3.4 Research Aim 21: Improve our understanding of the environmental aspects of farming. In particular, aim 21d: Site-based studies have provided environmental evidence in the Medieval period but further work is needed to link sites to the wider landscape and better-dated contexts. This will provide opportunities for understanding what happened at documented historical events around the region. Understanding the changing patterns of land use and their environmental impact has yet to be fully realised.
- 5.3.5 Research Aim 36: Improve our understanding of Medieval and later urbanism. In particular, aim 36e: Understanding the nature of change that towns have undergone in the past five hundred years has been a recurrent theme of past research agendas but it is the areas peripheral to urban centres that are being subjected to intensive redevelopment at the moment. These are the areas of early Post Medieval urban expansion which later “declined” into areas of intense but incredibly diverse economic and social activity. The opportunity must be found to identify locations which would benefit from full excavation and post-excavation analysis. Also, aim 36f: Techniques of recording and analysis which have been well tried and tested in the New World and in Commonwealth nations should be adopted and applied (see, for instance, examples in Egan and Michael 1999). The unrivalled opportunities for recording and understanding interrelated archaeological assemblages offered by urban excavation should be recognised as significant in trying to answer some of the research issues raised about the chronology and nature of change of material culture.
- 5.3.6 Research Aim 42: Improve our understanding of Medieval farming.
- 5.3.7 Research Aim 47: Assess the archaeological potential for studying Medieval economy, trade, technology and production.
- 5.3.8 The medieval period witnessed significant changes especially as larger estates enclosed former lands held in common by the surfs or peasant classes. The relationship between these larger houses and estates and their surrounding landscapes as influences from the Italian renaissance began to infiltrate more sprawling garden design, had a significant impact on the lower classes livelihoods and their ability to support themselves on the land. In particular these investigations will

attempt to contribute to the wider understanding the historical and cultural development of high medieval settlements and their disuse and abandonment.

## 6 INTERFACES

6.1.1 This project will interface with a series of other projects, stakeholders, and initiatives, summarised in the table below:

Interfaces	Description
Academic Advisory Board	An advisory group of subject experts will be formed to ensure that the project remains pertinent to relevant research questions and agendas as it progresses, interfacing with other teams working in similar landscapes in the UK.
Core Project Team	The core project team and specialist staff have consulted widely during the project planning and will continue to build on this as the project develops, forging strong links with local, national and international professionals and institutions actively engaged in a broad range of multi-period sites.
Local Stakeholders	The key local stakeholders are the Sudeley Castle Estate. The project will showcase the archaeology from Sudeley Castle Estate, and offer skills-based learning opportunities focused on teaching digital heritage skills to engage as broad a group as possible in the local heritage. A recent survey undertaken by DigVentures has identified that key issues preventing people engaging with their local heritage are based on access and financial concerns. The project will offer free enjoyable learning opportunities, both online and across multiple accessible locations, to help address the strong social and educational needs of the surrounding communities.

Table 2: Project interfaces

## 7 COMMUNICATIONS

### 7.1 Project team

7.1.1 The following section details specific staff responsibilities, drawing on terminology devised by Historic England for the MoRPHE project management framework. The overarching project is crowd funded and overseen by DigVentures. Project Assurance will be undertaken by Lisa Westcott Wilkins (Co-CEO) who will monitor compliance against the deliverables detailed in this document. Stephanie Duensing (Project Manager and Site Director) will oversee the management of the site and the day-to-day delivery and act as the primary contact point for the project, ensuring that stakeholders and clients are regularly updated as to progress.

7.1.2 The project team have all worked closely together over a number of research projects, including Lindisfarne (a joint project with the University of Durham, 2016 - ongoing), Pontefract Castle (2019 – 2021) and Bishop Middleham, County Durham (2018 – 2022). Stephanie Duensing (Project Manager) will undertake the day-to-day management of the project and direct the fieldwork, supported by Ben Swain (Community Archaeologist). Programme Officer Harriet Tatton will oversee the

education and engagement with young archaeologist and support fieldwork training on-site. Darcey Spenner (Community Archaeologist) will liaise with and coordinate volunteer and visitors to the site, with remote support from Maiya Pina- Dacier (Head of Community). Programme Officer Jasmine Tomy will coordinate all finds and environmental samples and support volunteer management and training, off-site. All core staff are employed in line with ClfA guidelines, and are practicing field archaeologists at PCIfA level or above. Senior project staff are members of ClfA in good standing.

## 7.2 Project management

7.2.1 DigVentures operates a computer-assisted project management system. Projects are undertaken under the direction of the Projects Director who is responsible for the successful completion of all aspects of the project. All work is monitored and checked whilst in progress on a regular basis, and the Directors check all reports and other documents before being issued. A series of guideline documents or manuals form the basis for all work.

7.2.2 DigVentures is a ClfA Registered Organisation (No. 102), and fully endorses the Code of Conduct and the Standards and Guidance documents of the Institute for Archaeologists. All DigVentures staff are employed in line with the Institute's Codes and will usually be members of the Institute.

## 7.3 Outreach and engagement

7.3.1 As a social business every aspect of the DigVentures approach is cognisant of a wider outreach agenda. Running alongside the Sudeley Castle Estate community archaeology project, DigVentures will include a dedicated engagement programme for volunteers offering opportunities for individuals to get involved. The programme will increase local awareness of the area's archaeology and heritage, and amplify this with a coordinated digital and social media strategy. All major social media channels will be used to promote blog content. A digital video specialist will be on site during the excavation and footage will be uploaded to DigVentures' YouTube channel.

7.3.2 The impact of this outreach work will be measured with a quantitative and qualitative evaluation of all participants to establish baseline audience awareness data and assist with future management strategies and promotion. This will be undertaken with a visitor survey conducted throughout the field season, targeting both excavation participants and casual visitors, and critically assessing the breadth, depth and diversity of engagement.

7.3.3 In addition to daily site tours will be delivered for Sudeley Castle visitors, we will be running a programme of virtual events including a virtual site tour and workshop. A dedicated welcome tent will be erected on site, and will be staffed by DigVentures throughout the dig. Special activities and trench tours will be offered, as well scheduled lunchtime chats with the archaeological team. The project will be widely advertised locally on radio, newspapers and the parish council newsletter.

7.3.4 Engagement will be both on and offline, with project updates on our website timeline developed to engage a new local and global audience, inviting external communities

(and those not usually engaged with archaeology) to take an active role in knowledge production.

#### 7.4 Dissemination and reporting

7.4.1 Rapid dissemination of the results to, and involvement of, stakeholders of the project is vital throughout. This will take place through multiple channels, addressing a multitude of established and new audiences. Dissemination outlined below will all be undertaken during 2024 to 2025, and will include, but not be limited to;

- Dedicated timeline with news updates on a blog and all major social media channels (Facebook, Twitter, Flickr and Instagram) amplified through third-party coverage by the networked blogging community
- Dedicated digital archive of the excavation data
- Wide circulation of the project assessment and the final report
- Site publication in an appropriate local/national journal commensurate with the results.

#### 7.5 Project archive

7.5.1 The project archive will be prepared in accordance DigVentures guidelines for Archive Preparation, following Appendix 1, P1 of MoRPHE PPN 3 (English Heritage 2011), fulfilling the Guidelines for the preparation of excavation archives for long term storage (UKIC 1990). The complete archaeological project archive will be retained by the landowners, Sudeley Castle and Gardens. All reports produced by the project will be openly and freely disseminated through Historic Environment Record, OASIS portal and DigVentures website. Copyright on all reports submitted will reside with DigVentures, although a third party in-perpetuity licence will automatically be given for reproduction of the works by the originator, subject to agreement in writing with DigVentures.

## 8 PROJECT REVIEW

8.1.1 The project will be continually reviewed by the Project Executive and Project Manager, with a formal review undertaken at the end of each Stage as follows:

Stage	Description	Review Point	Completion Date
Initiation	Consideration of Project Proposal	RV1 – Assemble Project Team and liaise with stakeholders	Completed March 2020
Stage 1	Project Start-up, finalising Project Design and definition of scope	RV2 – Sign-off on MoRPHE Project Design, and liaison with stakeholders and landowners	Completed April 2020
Stage 2	Archaeological Fieldwork (third season) and associated in-house post-ex	RV3 – assemble site archive and distribute pertinent data to specialists	Completed October 2021
Stage 3	Assessment Report & Updated Project Design	RV4 – critically review findings, making recommendations for further work or closure	Completed June 2022
Stage 4	Analysis & Publication	RV5 – final publication sign-off PXA	Completed August 2022
Stage 5	Consideration of Project Proposal	RV6 – Assemble Project Team and liaise with stakeholders	Completed October 2021
Stage 6	Project Start-up, finalising Project Design and definition of scope	RV7 – Sign-off on MoRPHE Project Design, and liaison with stakeholders and landowners	Completed August 2022
Stage 7	Archaeological Fieldwork (fourth season) and associated in-house post-ex	RV8 – assemble site archive and distribute pertinent data to specialists	Completed October 2022
Stage 8	Assessment Report & Updated Project Design	RV9 – critically review findings, making recommendations for further work or closure	Completed Jun/July 2023
Stage 9	Analysis & Publication	RV10 – final publication sign-off PXA	Completed Aug 2023
Stage 10	Consideration of Project Proposal	RV11 – Assemble Project Team and liaise with stakeholders	Completed October 2022
Stage 11	Project Start-up, finalising Project Design and definition of scope	RV12 – Sign-off on MoRPHE Project Design, and liaison with stakeholders and landowners	July/Aug 2023
Stage 12	Archaeological Fieldwork (fifth season) and associated in-house post-ex	RV13 – assemble site archive and distribute pertinent data to specialists	Proposed October 2023
Stage 13	Assessment Report & Updated Project Design	RV14 – critically review findings, making recommendations for further work or closure	Proposed May/June 2024
Stage 14	Analysis & Publication	RV15 – final publication sign-off PXA	Completed Summer 2024
Stage 15	Consideration of Project Proposal	RV16 – Assemble Project Team and liaise with stakeholders	Completed Autumn 2023

Stage	Description	Review Point	Completion Date
Stage 16	Project Start-up, finalising Project Design and definition of scope	RV17 – Sign-off on MoRPHE Project Design, and liaison with stakeholders and landowners	Aug 2024
Stage 17	Archaeological Fieldwork (fifth season) and associated in-house post-ex	RV18 – assemble site archive and distribute pertinent data to specialists	Proposed Winter 2024/25
Stage 18	Assessment Report & Updated Project Design	RV19 – critically review findings, making recommendations for further work or closure	Proposed Jun/July 2025
Stage 19	Analysis & Publication	RV20 – final publication, sign-off and prepare archive for accession	Completed Autumn 2025
Stage 20	Consideration of Project Proposal	RV21 – Assemble Project Team and liaise with stakeholders	Completed Autumn 2024
Stage 21	Project Start-up, finalising Project Design and definition of scope	RV22 – Sign-off on MoRPHE Project Design, and liaison with stakeholders and landowners	Aug 2025
Stage 22	Archaeological Fieldwork (fifth season) and associated in-house post-ex	RV23 – assemble site archive and distribute pertinent data to specialists	Proposed Winter 2025/26
Stage 23	Assessment Report & Updated Project Design	RV24 – critically review findings, making recommendations for further work or closure	Proposed July/Aug 2026
Stage 24	Analysis & Publication	RV25 – final publication, sign-off and prepare archive for accession	Completed Autumn 2026
Closure			Winter 2026/27

Table 3: Project review stages

## 9 HEALTH AND SAFETY

9.1.1 DigVentures will undertake the works in accordance with Health and Safety requirements and a Health and Safety Plan. This document will take account of any design information pertaining to above and below ground hazards. DigVentures will ensure that all work is carried out in accordance with its company Health and Safety Policy, to standards defined in The Health and Safety at Work etc. Act 1974, and The Management of Health and Safety Regulations 1992, and in accordance with the SCAUM (Standing Conference of Archaeological Unit Managers) health and safety manual Health and Safety in Field Archaeology (1996).

## Part Two: Resources and Programming

### 10 PROJECT TEAM STRUCTURE

#### 10.1 Team and responsibilities

10.1.1 DigVentures' Project Team will be as follows.

10.1.2 A summary CV, setting out the skills and expertise of DigVentures core team members is set out in Appendix 1, with CVs for the wider specialist team available on request.

Name	Initials	Project Role	Key Responsibility
Lisa Westcott Wilkins	LWW	Project Executive	Overall project responsibility, budget responsibility and project assurance
Stephanie Duensing	SD	Project Manager/ Archaeological Site Director	Archaeological co-direction (on and off-site), liaison with project team, partners and Stakeholders, Post-ex and reporting, and PM ceramics assessment
Maiya Pina-Dacier	MPD	Director of Engagement	Managing community outreach strategy, and crowdfunding (off-site)
Shelby Stapleton	SS	Events and Communications Officer	Creating content for online participants and community events
Ben Swain	BS	Community Archaeologist	On-site field-work, and post-excavation management
Harriet Tatton	HT	Programme Officer	On-site fieldwork, post-excavation, kids and community liaison
Jasmine Tomys	JT	Programme Officer	Post-excavation and archive management (off-site)
Maggie Eno	ME	Expert –Videographer	Filming
Hannah Russ	HR	Expert – Animal bone	Animal bone specialist
Charlotte Britton	CB	Expert – Medieval Pottery	Medieval pottery specialist

Table 4: Team and responsibilities

## 11 METHODOLOGY

### 11.1 Introduction

11.1.1 The methods reflect the Project Stages set out below, and a task list including allocation of staff and team members in Section 11. Detailed method statements relating the specific techniques or approaches included below can be found in Appendix 1 at the end of this document.

### 11.2 Stage 21 – Project Start-Up and Design

11.2.1 An Updated Project Design (this document) has been prepared.

### 11.3 Stage 22 – Archaeological Fieldwork (season 6)

11.3.1 A Test pitting weekend in October 2018 comprised the first fieldwork season and the second through sixth seasons of project fieldwork conducted from May – June 2019, October 2021, October 2022 October 2023 and October 2024 are also now completed. The seventh season of project fieldwork (scheduled from 20 October – 3 November 2025) will comprise of a further evaluation trenching exercise targeting topographical survey, LiDAR and cropmark data from the field to the east of St Mary's Church, required to meet aspects of Aims 1 and 2 (see Section 4 above). It will aim to inform the following research questions:

- Q1: Can the layout of the site and associated sub-surface archaeology be established from previous remote survey?
- Q2: Can we identify any phasing in the topographic, remote sensing anomalies indicative of an extended period of use?
- Q3: What is the landscape setting and character of the medieval settlement in Hop Field, and how did this shape its design and development of Sudeley Castle Estate, if at all?
- Q4: Do any archaeological remains at the site survive pre-dating the Castle, and what is the potential of this area to inform a greater understanding of the landscape context including its relationship to an deserted medieval village (or structures) and other deserted medieval village sites?
- Q5: Can we refine the chronological narrative for the site, including the presence of earlier and later features, as defined in Aim 1?
- Q6: Can we understand the date, form and motivation for the desertion of any potential earlier structures? Is there any material evidence linking the castle or gardens to the area?
- Q7: Building on previous work undertaken, can we build an understanding of the historical and cultural context of medieval settlements?

11.3.2 Three evaluation trenches are proposed for 2025 in Hop Field to the east of St Mary's Church over an area of anomalies identified from topographical, satellite images of cropmarks and LiDAR surveys. (Figure 2-4). The nature and targets for evaluation trenches are further detailed in the methodological statements included in Appendix 1 (see Table 8).

- Trench 21 (20m x 5m) will continue to investigate linear and semi-circular stone features which have been interpreted as being part of a store and boundary wall

for a possible burgage plot belonging to a Medieval houses along the main road into Winchcombe.

- Trench 22 (12m x 5m) will also continue to investigate a rough stone wall which has been interpreted as being a possible continuation of the boundary wall for a burgage plot from a Medieval house along the main road into Winchcombe.
- Trench 23 (5m x 10m) will extend the hand-excavated contingency trench which was left incomplete in the 2024 field season due to time constraints.
- A contingency test pit (5m x 5m) will further investigate LiDAR anomalies and topographical targets associated with another possible burgage plot from Medieval houses along the main road into Winchcombe, nearest to existing street and fence.

#### 11.4 Stage 23 – Assessment Report & Updated Project Design

11.4.1 This Stage will address Aim 3, focusing on answering the following research questions:

- Q8: What is the current state of the archaeological and palaeoenvironmental material across the site?
- Q9: How well do deposits and artefacts survive, and how deeply are they buried?
- Q10: What is the range and spatial patterning of artefacts recovered from the gardens, and can this inform our understanding of the use of the landscape and utilisation of wider resources?
- Q11: Can we increase our understanding of the water features, planting beds and environment of the Tudor gardens at Sudeley Castle Estate?

#### 11.5 Stage 24 – Analysis and Publication

11.5.1 Addressing Aim 4, this is the main reporting and recommendation stage of the project, focusing on the following research questions.

- Q12: What can an integrated synthesis of the results of this work with previous studies of contemporary regional sites tell us about the site and its setting?
- Q13: What recommendations can be made to protect, conserve and enhance the site?

## 12 STAGES, PRODUCTS AND TASKS

### 12.1 Methodological Linkages

12.1.1 It is anticipated that the project will be undertaken in four stages (Stage 20-23), these are set out in the table below and are set against the project aims and questions that will be met at each stage, the products that will be produced and the tasks undertaken.

Stage	Description	Project Aims/ Questions	Products	Task & ID Number
Stage 21	Project Start-up and Design	Aim 1-4 Q1-13	1. Permissions (planning application & stewardship derogations)  2. Finalised UPD & Risk Log  3. Educational Plan & Information Pack  4. Digital Communication Plan  5. Risk Assessment & Health and Safety Plan  6. DMP	1. Consult with wider project team and stakeholders to define milestones and delivery timetable.  2. Core Archaeology Team Meeting.  3. Design project database.  4. RV12 – Sign off on MoRPHE
Stage 22	Archaeological Fieldwork (fifth season)	Aim 1 Q1-2  Aim 2 Q3-7	6. Field Archive  7. Survey Archive  8. 3D Survey Archive	8. Site Preparation  9. Fieldwork (remote sensing, survey & excavation)  10. RV13 – assemble site archive & distribute to specialists
Stage 23	Assessment Report & Updated Project Design	Aim 3 Q8-11	9. Stratigraphic & Assessment Report	13. Specialist finds and palaeoenvironmental assessments  14. Integrated assessment report

Stage	Description	Project Aims/ Questions	Products	Task & ID Number
				15.RV14 – recommendations for further work
Stage 24	Analysis and Publication	Aim 1-4 Q1-13	10. Final report  11. Publication  12. Completed and accessioned archive	18. Specialist analysis  19. Finalise report and publication  20. Prepare data and archive for deposition  21. RV15 – final sign-off  22. Closure

Table 5: Stages, Products and Tasks

### 13 OWNERSHIP

- 13.1.1 The Copyright on all reports submitted will reside with DigVentures, although a third party in-perpetuity licence will automatically be given for reproduction of all products. The original copyright holder will retain copyright in pre-existing data.

## 14 RISK LOG

Risk number	1	2	3	4
Description	Inclement weather - prolonged periods of rain	Exceptional weather (drying exposed archaeology)	Absence of core team member	Absence of specialist team member
Probability	Medium	Medium-low	Low	Low
Impact	Delay programme of work	Slow progress	Delay programme of work	Delay programme of work
Countermeasures	Provision of site hut, and planned indoor archiving tasks with flexible programme	Provision of water bowser + spray	Reallocate responsibilities or appointment of alternative	Reallocate responsibilities or appointment of alternative
Estimated time/cost	3 Days	None	Minimal if done by adjustment	Minimal if done by adjustment
Owner				
Risk number	5	6		
Description	Equipment theft/breakages	Serious site injury		
Probability	Medium	Medium		
Impact	Delay programme of work	Delay programme of work		
Countermeasures	Removal of finds material and digital equipment from site	Detailed H&S Risk Assessment + daily safety briefing		
Estimated time/cost	3 days	3 days		
Owner				

Table 6: Risk log

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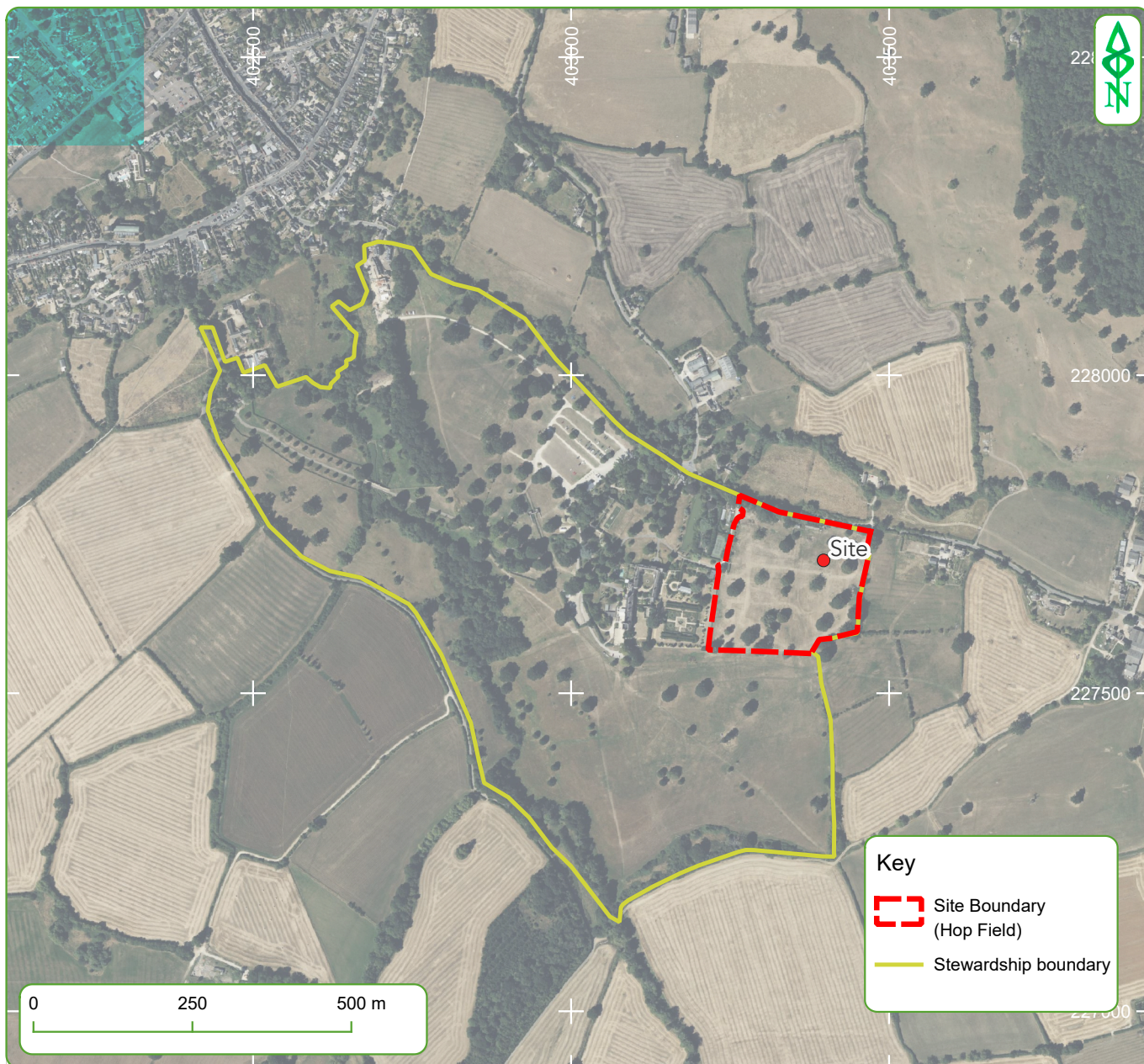
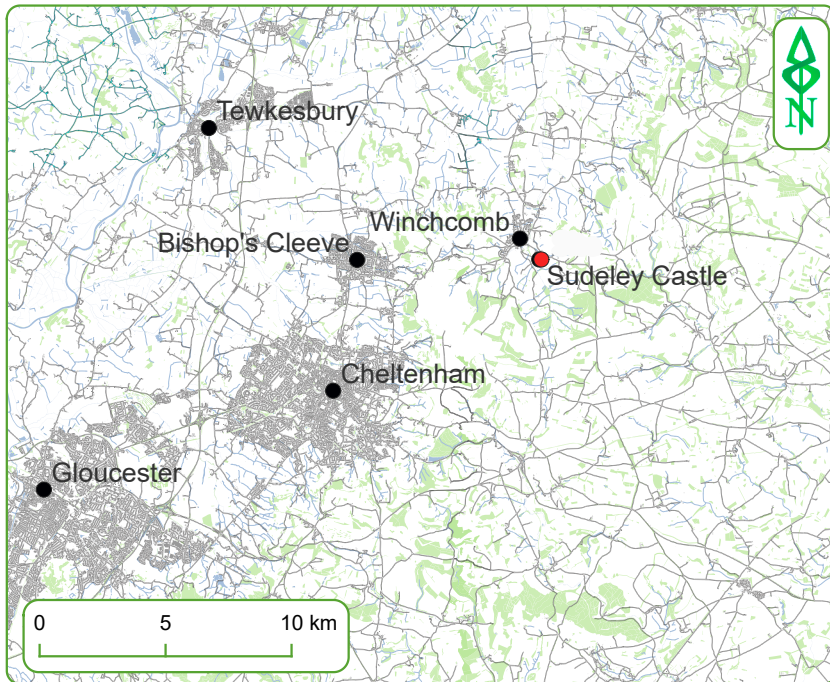


Figure 1. Site location

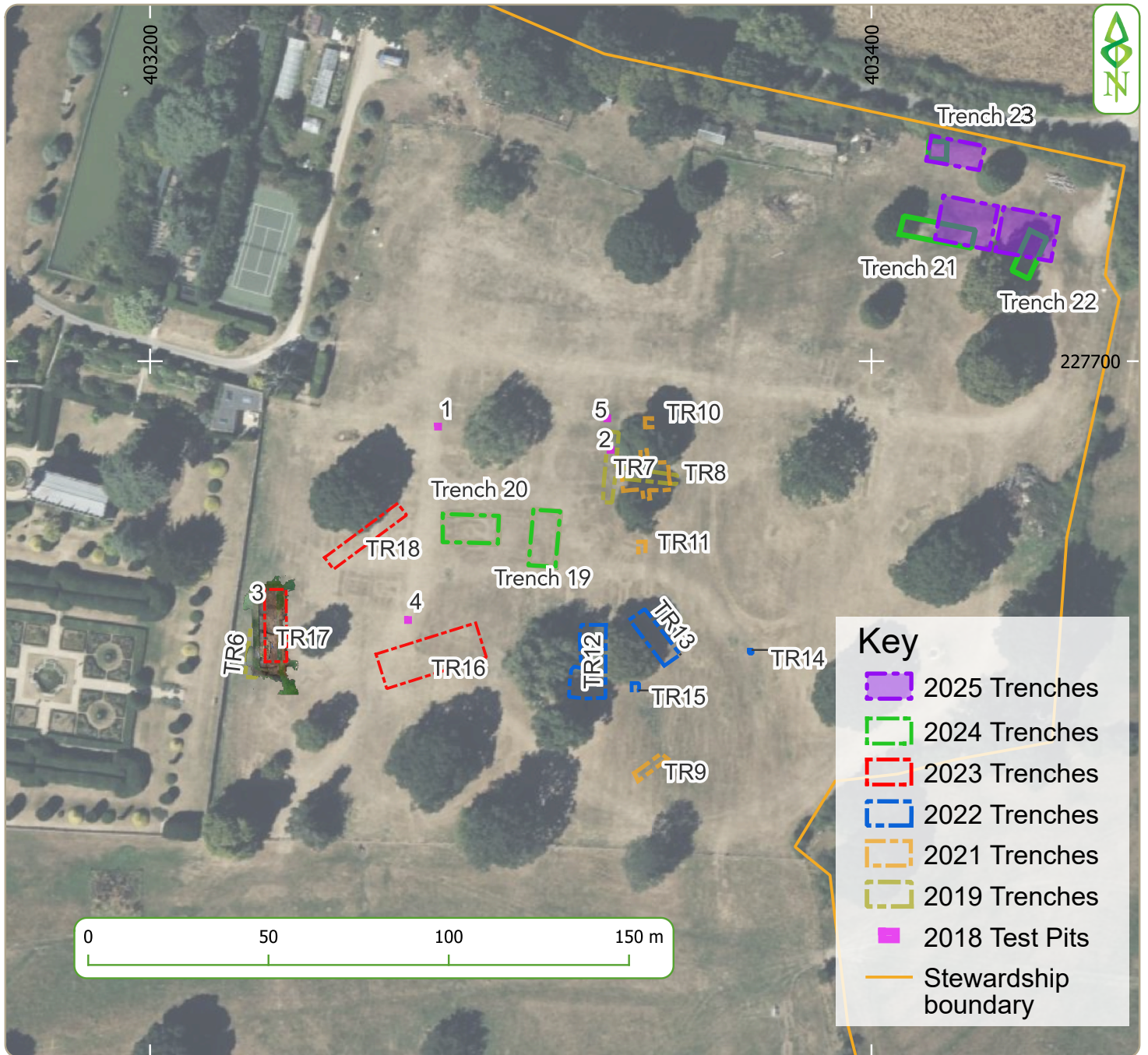


Figure 2. Trench locations

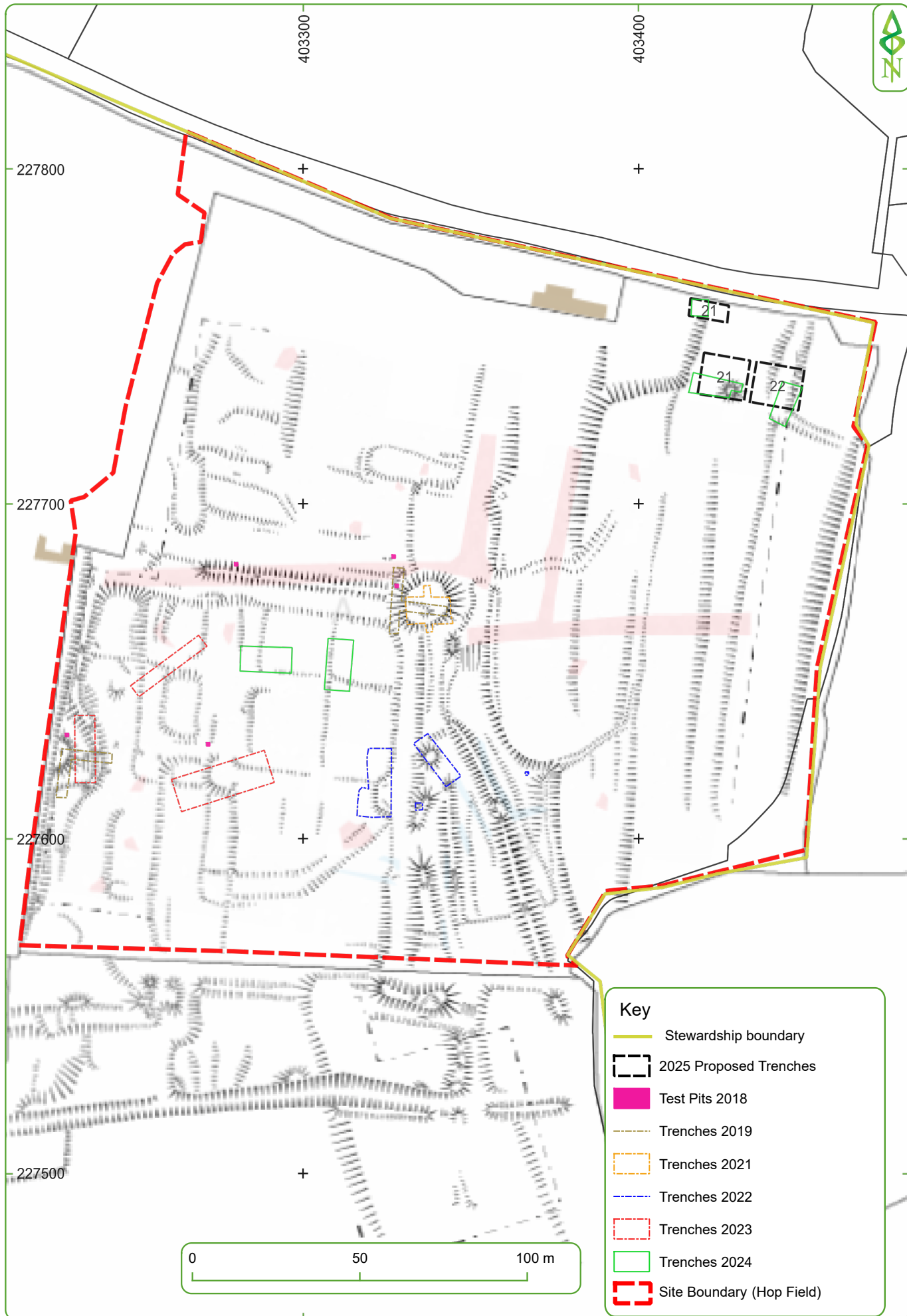


Figure 3. Proposed 2025 trench locations overlying earthworks

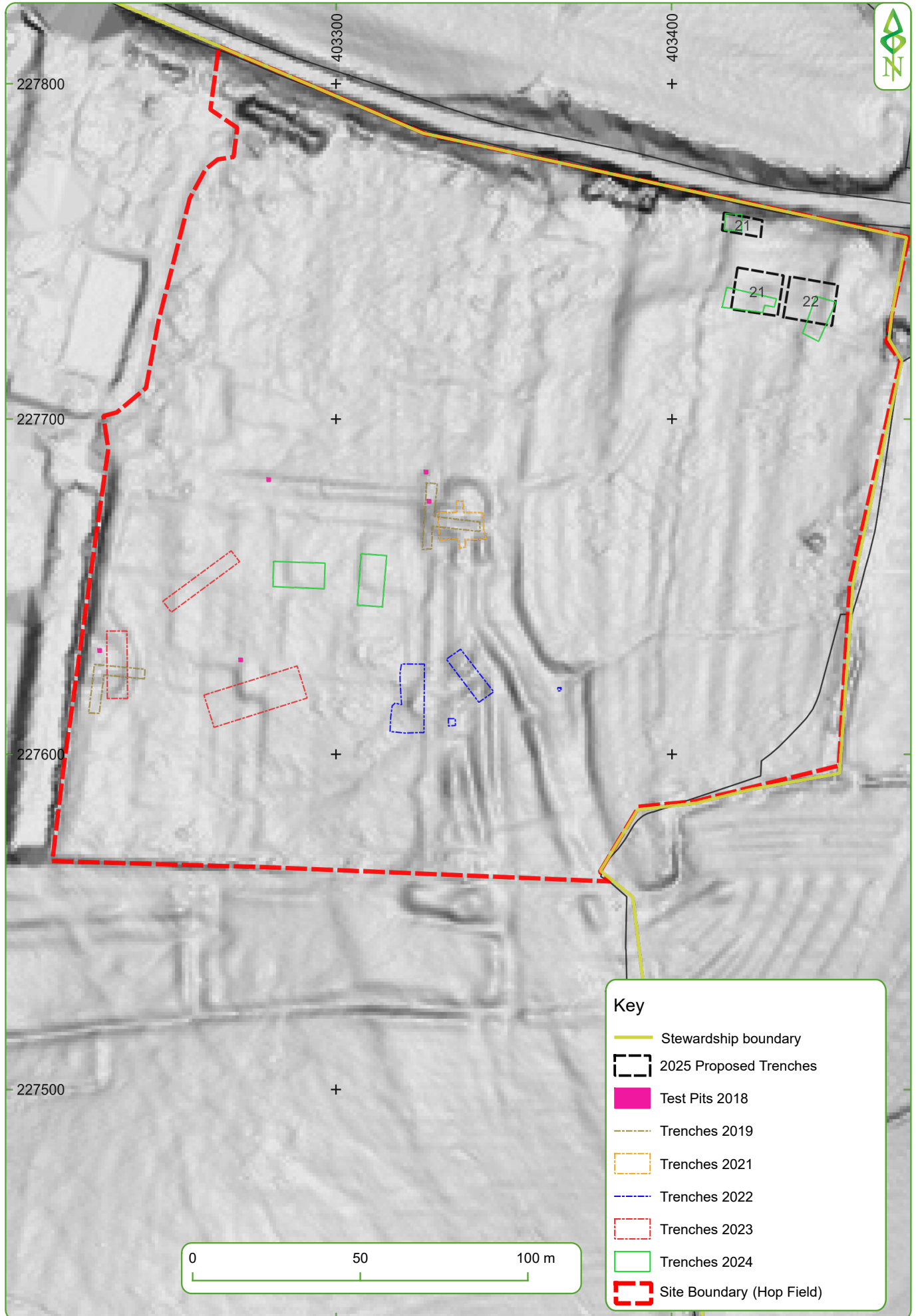


Figure 4. Proposed 2025 trench locations overlying LiDAR

## Appendices

### APPENDIX 1 METHOD STATEMENTS

The methods for the proposed project will involve a combination of Lidar survey, geophysical survey (resistivity), GIS modelling, archaeological excavation, sampling, palaeoenvironmental sampling and assessment. The methods are linked directly to the project aims and objectives (see Table 1) and detailed below.

Key Questions and Objectives	Lidar, earthwork survey and geophysics Collation	Photogrammetry and digital terrain modelling	Auger survey	Geophysical survey	Archaeological excavation	Sampling	Environmental assessment	Finds assessment	Synthesis and data integration
Q1	✓	✓		✓					
Q2	✓	✓		✓					
Q3		✓							
Q4			✓		✓		✓		
Q5					✓			✓	
Q6					✓		✓	✓	
Q7					✓		✓		
Q8			✓		✓	✓	✓	✓	
Q9			✓		✓	✓	✓	✓	
Q10					✓			✓	
Q11			✓		✓	✓	✓		
Q12									✓
Q13									✓

Table 7: Linking methods with objectives

#### Photogrammetry survey

Photogrammetry survey will utilize Agisoft PhotoScan 3D Modelling software to detect the feature points of the structure, and match these in different images to create a point cloud. The camera positions will be calculated automatically by the software and a dense reconstruction or geometric model will be built to create a DSM. The resulting model can then be. The resulting DSM can be manipulated for viewing from any angle using a variety of

artificial light and shading techniques to highlight certain features, or overlaid or draped with the original photographs for true colour representation.

Images will be captured perpendicular to the structure using telescopic mounted cameras, to deliver optimum results requiring little or no rectification. All images are taken with a DSLR digital camera with a variety of standard and other lenses and are captured in RAW format for later processing into high resolution JPG and TIF files, and downloaded directly on to the hard disk.

### Archaeological excavation

Three evaluation trenches (Figure 2-4) will be excavated measuring 12m x 14m (Trench 21) positioned to target an anomaly which has been interpreted from the LiDAR as being a possible garden path, raised feature and plant beds; 12m x 14m (Trench 22) positioned to re-target a possible water feature and more fully understand remaining questions surrounding its use; 12m x 5m (Trench 23) to investigate anomalies which have been interpreted from the LiDAR as being a possible garden path and plant beds. A contingency trench (5m x 4m) will investigate a possible garden feature to the southernmost extent of Hopfield seen in LiDAR.

Trench	Dimensions	Target	Description
21	12 x 14m	To investigate linear and sub-rectangular anomalies which have been interpreted from the LiDAR as being a possible burgage plot from Medieval houses along the main road into Winchcombe.	Rectangular shaped evaluation trench aligned E-W
22	12m x 14m	Will investigate a curvilinear anomaly which has been interpreted from the LiDAR as being a possible burgage plot from Medieval houses along the main road into Winchcombe.	Rectangular shaped evaluation trench aligned E-W
23	12m x 5m	A possible medieval feature to the NE extent of Hopfield seen in LiDAR near road.	Rectangular shaped evaluation trench aligned E-W
Contingency	5 x 4m	A possible medieval feature to the NE extent of Hopfield seen in LiDAR near road.	Square test pit aligned N-S

Table 8: Trench targets

### Interventions

All machine excavation will be carried out under constant archaeological supervision using a toothless bucket, and will include visually scanning spoil for artefacts. As soon as archaeological deposits or features are recognised, machining will be stopped and trenches excavated by hand. Each trench will be cleaned by hand where appropriate, planned and photographed prior to any hand-excavation. A representative section, not less than 1m in width, of the entire deposit sequence encountered will be recorded.

If complex stratigraphy and/or significant remains (e.g. structural remains, artefact scatters, remains clearly of a funerary nature etc.) are encountered, these may only be excavated to

the minimum requirement in order to satisfy the project objective, to avoid compromising the integrity of remains that may be either (a) preserved in situ, or (b) excavated in detail during any next phase of research excavation. Interventions will focus on feature intersections in order to establish relative chronologies, and 'clean' sections to maximise retrieval of stratigraphically secure dating evidence and environmental samples.

Full written, drawn and photographic records will be made of each trench and test pit, even where no archaeological remains are identified. A plan at an appropriate scale (1:50 or 1:100) will be prepared, showing the areas investigated and their relation to more permanent topographical features, and the location of contexts observed and recorded in the course of the investigation. Plans, sections and elevations of archaeological features and deposits will be drawn as necessary at an appropriate scale (normally 1:20, or 1:10 for complex features). Drawings will be made in pencil on permanent drafting film.

Written records will be made using Diggit, a cloud-based, software platform enabling participants to create digital data entries directly from the field using any web-enabled device (such as a smartphone or tablet) into a live relational database. record sheets for each context, trench or test pit, following the DigVentures single context recording system. Digital photography will be used for all photography of significant features, finds, deposits and general site working. The photographic record will illustrate both the detail and the general context of the principal features and finds excavated, and the site as a whole.

#### Augur survey

Hand-augering will be used if resources allow (Dutch or gouge auger as appropriate) to investigate transects through the monument. Data points will be taken with location recorded with GPS. Descriptions of all sediments will be made, although it is important to note that in general augering with open-chambered augers is not recommended as suitable for the retrieval of uncontaminated samples for laboratory work, and especially for radiocarbon dating. The proposed augur survey will include:

#### Palaeoenvironmental sampling

All deposits with good palaeoenvironmental potential will be sampled; bulk samples shall be taken from the section as appropriate, under advisement from the project specialist. Context specific samples will be taken by the most appropriate means (kubiena tins, contiguous columns, incremental block, bulk etc.) for multi-disciplinary analysis. All aspects of the collection, selection, processing, assessment and reporting on the environmental archaeology component of the evaluation shall be undertaken in accordance with the principles set out in *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation* (English Heritage 2011) and with reference to the *Association for Environmental Archaeology's Working Paper No. 2, Environmental Archaeology and Archaeological Evaluations* (1995).

#### Bulk sampling strategy

Bulk samples will usually be 40-60 litres in size, depending on the likely density of macrofossils. Ten litre samples will only be used for the recovery of plant macrofossils from waterlogged contexts. Samples will be stored in ten litre plastic buckets with lids and handles. A waterproof label will be fixed to the bucket and will record site code, context number and sample number and number of buckets in comprising the sample. A duplicate label will be retained inside the bucket. Samples will be protected from temperatures below 5° and above 25° Celsius and will be prevented from either wetting or drying out.



- Bulk samples selected for processing shall be wet-sieved/floatated and washed over a mesh size of 250 microns for the recovery of palaeobotanical and other organic remains, and refloatated to maximise recovery;
- Non-organic residues shall be washed through a nest of sieves of 10mm, 5mm, 2mm, 1mm and 250 micron mesh to maximise finds recovery
- Both organic and non-organic residues shall be dried under controlled conditions;
- The dried inorganic fractions shall be sorted for small finds or any non- buoyant palaeoenvironmental remains, and scanned with a magnet to pick up ferrous debris such as hammerscale;
- The dried organic fractions shall be sorted under a light microscope to identify the range of species or other material on a presence/absence basis, the degree of preservation of the bio-archaeological material and the rough proportions of different categories of material present;
- In the event that waterlogged deposits are identified and sampled, further processing shall be undertaken as appropriate and agreed, including paraffin flotation to recover insect remains. Any such remains shall be scanned to identify and assess their potential;
- Selection of other types of sample for processing and the methods to be used for processing and assessment shall be undertaken on the advice of the relevant specialist and shall be agreed with the Consultant before implementation.

Contexts that are well stratified and potentially datable are all of value, so a systematic approach to selecting samples for processing and assessment will be taken. These will be divided into three categories:

- Category A (always sampled): contexts where the composition of the sediments are likely to inform us of the use of a particular structure or feature or if the deposits are waterlogged. These will include: in situ occupation deposits and fills/layers associated with particular activities; hearths; destruction deposits; basal pit/slot trench fills; waterlogged deposits, cesspits or latrines.
- Category B (always sampled, though discretion should be exercised): deposits identified as containing material that could yield information regarding their origin or the process that produced them. These will include: dumps, middens, upper pit fills with evidence for charred material, shell, bone and industrial waste.
- Category C: deposits containing material which is not necessarily related to the function of the feature to which they are related, but which can characterise deposits from different areas of the site. These will include: secondary and tertiary fills, postholes, levelling deposits, spreads etc.

Category A and B deposits should always be sampled, and Category C deposits sampled on a random basis (such as 1 in 5). These samples can help to characterise the background noise of a site, so as to highlight spatial or temporal trends and provide material that can be directly compared with those from Category A and B. All samples will be taken in large white 10 litre tubs, with labels placed inside with the deposit and attached to the bucket. All samples will be processed on site in a dedicated floatation and wet sieving area.

### Zooarchaeology

If large deposits of bone or marine shell are encountered advice of the project zooarchaeologist (Matilda Holmes) will be sought as regards further sampling. If large deposits of bone or marine shell are encountered the project zooarchaeologist advice will be sought as

regards further sampling. If articulated groups of bones are encountered they will be surveyed, recorded in situ, (including digital photography and planning), and then excavated to retain the group's integrity. Bones from each articulated limb will be bagged separately. If inhumations or cremation burials are encountered and excavated the surrounding soil will be sampled to retrieve any loose teeth or bone fragments.

All hand collected animal bones and bones from processed samples will be assessed, following English Heritage Environmental Archaeology guidelines (2002). If warranted by the size of the recovered assemblage, it will be assessed using two different quantification methods to determine the most suitable for full analysis, taking into account methods used in comparative assemblages. The assessment will not distinguish between certain taxonomic groups, for example equids (horse and donkey); full speciation should be carried out as part of any recommended analysis, using a vertebrate comparative collection. In addition to quantification of domestic species and occurrence of wild species, the assessment will consider the number of articulated bone groups, and the prevalence of aging, sexing and osteometric data available for full analysis, following standard published conventions. The assessment report will comment on the potential of the assemblage, particularly in the context of the excavation's research questions and current understanding of comparative assemblages. It will also provide recommendations for any necessary future analysis.

### Human osteoarchaeology

In the event of the discovery of human remains (inhumations, cremations and disarticulated fragments) they should be left in situ, covered and protected, until the English Heritage Inspector of Ancient Monuments has been informed. If a decision is taken to remove them, they will be fully recorded and excavated in compliance with the relevant Ministry of Justice Licence. The excavation of human remains will be carried out in accordance with the procedures detailed in the document Excavation and post-excavation treatment of cremated and inhumed human remains (McKinley and Roberts 1993, IFA Technical Paper 13). Significant assemblages of human remains will be subject to an assessment of DNA preservation to establish potential familial relationships.

Inhumations will be scanned with a metal detector prior to excavation, and the position of possible metallic grave goods will be noted. Wherever possible, each burial will be excavated within a single working day, particularly with regard to visible grave goods. To minimise unauthorised disturbance of human remains, partially exposed remains will be covered overnight, though in such a way as to not draw undue attention, using loose excavated spoil. Excavation of inhumations will be undertaken using a trowel, plasterer's leaf, plastic spoon and paintbrush as appropriate depending on the condition of the bones. When lifted the bones will be bagged by skeletal area (skull, axial, upper and lower limbs) with separate bags for the left and right side. A standard series of samples will be taken from each inhumation burial to ensure full recovery of any remaining osseous tissues or small artefacts. Once human remains are removed from inhumation graves, any soil residue remaining at the base of the grave will be retrieved for bulk processing.

Inhumations and cremations will be drawn at a scale of 1:10 (or photos will be taken to create a photogrammetry model) and photographed prior to lifting. They will be recorded on Skeleton Record Sheets that form an integral part of the DiggIt recording system. The recording will include condition, completeness, articulation, orientation and posture. Fragile objects found within graves will be lifted with appropriate care and handling to minimise

breakage. This may include subsequent controlled excavation under laboratory conditions. A trained conservator will be employed on the site if necessary.

All cremation burials and cremation-related contexts will be excavated and sampled in quadrants to ascertain the distribution of any archaeological components within the fills, with division into spit also if appropriate. Cremation-related features other than burials may be subject to more detailed sub-divisions, the appropriate strategy being developed by a specialist as the size and nature of the remains becomes clear. Undisturbed and slightly disturbed, but largely intact, urned cremation burials will be lifted *en masse* for excavation under laboratory conditions. The urns will be wrapped in crepe bandages and securely boxed for transportation. Where a vessel has been crushed, thereby disrupting any original internal deposition of the cremated remains, it will be lifted *en masse* after separate recovery of displaced sherds. All cremation-related contexts will be subject to whole-earth recovery from the point at which any cremated bone or other pyre debris is observed. If deposits of placed human bone are encountered in features, these may be excavated in spits if appropriate. The soils from these features will be bulk sampled.

### Finds

Finds will be treated in accordance with the relevant guidance given in the *Chartered Institute for Archaeologist's Standard and Guidance for Archaeological Evaluation* (2008), excepting where statements made below supersede them. All artefacts will be retained from excavated contexts, except features or deposits undoubtedly of modern date. In these circumstances sufficient artefacts will only be retained to elucidate the date and function of the feature or deposit. All artefacts from the evaluation works will, as a minimum, be washed, marked, counted, weighed and identified in line with guidance provided by Bristol Museums and Archives (2012). Any stratified ironwork will be X-rayed and stored in a stable condition along with other fragile and delicate material. X-rays of objects and other conservation needs will be undertaken by appropriately qualified conservation specialists. Suitable material, primarily the pottery and non-ferrous metalwork, will be scanned to assess the date range of the assemblage.

### Conservation

Artefacts will be recovered as a matter of routine during the excavation. When retrieved from the ground finds will be kept in a finds tray or appropriate bags in accordance with *First Aid for Finds* (Walker 1990). Where necessary, a conservator may be required to recover fragile finds from the ground depending upon circumstances.

After the completion of the fieldwork stage, a conservation assessment will be undertaken which will include the X-radiography of all the ironwork (after initial screening to separate obviously modern debris), and a selection of the non-ferrous finds (including all coins). A sample of slag may also be X-rayed to assist with identification and interpretation. Wet-packed material, including glass, bone and leather will be stabilised and consolidated to ensure their long-term preservation. All finds will be stored in optimum conditions in accordance with *First Aid for Finds and Guidelines for the Preparation of Excavation Archives for Long-Term Storage* (Walker, 1990).

The conservation assessment report will include statements on condition, stability and potential for further investigation (with conservation costs) for all material groups. The conservation report will be included in the updated project design prepared for the analysis stage of the project.

### **Scientific dating**

Where uncontaminated deposits are recorded which are able to inform understanding of the research aims (in particular, relating to the construction of the banks and ditches), appropriate samples will be taken. Radiocarbon dating will be appropriate for clarifying and linking aspects of archaeological and environmental chronologies, and a strategy for this will be agreed following discussion with HE Science Advisor and the relevant specialists.

### **Synthesis and data integration**

The results of the project will be integrated and synthesised with those from the previous investigations and other relevant work within the region and further afield (see Section 1 and 2 above). This will include a literature review of other pertinent sites.

## APPENDIX 2 FIELD SCHOOL CURRICULUM

DigVentures' field school curriculum for archaeology forms the basis of all our on-site vocational training opportunities. Field schools are available to participants of all skills levels to attend and receive hands-on training over the course of one day, two days or one week (or more). Field schools are designed and run by professional archaeologists, working alongside our Venturers to excavate and record archaeology to the highest standards. Due to the unique nature of each of the archaeological sites we work at, the content of the field schools may vary from project to project. However, our core learning curriculum will remain consistent across all our projects and provides an outline of the minimum our participants (or Venturers) should expect to achieve during their time with us on site.

Our archaeology field school is endorsed by the Chartered Institute for Archaeologists and designed to support the Archaeology Skills Passport.

### About the field school

Archaeology is a profession, as well as an academic field of study. Many years of experience, skills development and education are necessary in order to develop the expertise, and attain the necessary qualifications, to run archaeological excavations. Archaeology is also an activity which inspires enthusiasts all around the world, from active volunteers through to armchair archaeologists who devour every book, programme and magazine they can get their hands on. We are consistently amazed at the passion and level of knowledge of the people we meet through our work at DigVentures, and everyone has one thing in common: they want to learn more about how to do archaeology.

We have designed our field schools to help support anyone who is keen to roll up their sleeves, jump in the trenches and learn how archaeology is done. Whether you can join us for one day, a weekend or a full week (or two), we can teach you what you need to know to get the most out of your archaeological experience.

### Our core learning curriculum

Our field schools provide a step-by-step guide through the core skills needed to contribute to an archaeological excavation. What do you need to know about the archaeology before you begin to dig? How do you recognise and excavated archaeological layers? What's the point of drawing in the age of digital? What's with all the string, and funny red and white sticks in the trenches? If you are with us for a single day, we will make sure you get to grips with the fundamental skills, such as using a trowel. The longer you can stay, the more you will learn. You can use the look-up table below to see which of the core archaeological skills you will learn on a DigVentures field school depending on the length of your experience.

Skill	Learning outcome	One Day	Two Days	Week +
<i>Professional ethics</i>	Can anyone just turn up and dig an archaeological site? Or is there more to it than that?	✓	✓	✓
<i>Site Safety</i>	Be aware of the particular Health & Safety issues on the archaeological project	✓	✓	✓
<i>Small hand tools</i>	Understand the correct use of the trowel and other smaller hand tools including their safe use and maintenance.	✓	✓	✓



Skill	Learning outcome	One Day	Two Days	Week +
<i>Large hand tools</i>	Understand the correct and safe use of larger tools as well as appropriate loading for buckets and wheelbarrows.	✓	✓	✓
<i>Site formation processes</i>	Understand the process of site formation, including fills, layers, structures or natural deposits. Everything is in the ground for a reason and sites come to look the way they do now for a number of different reasons. By the time you leave site you will have a basic understanding of why the site looks the way it does.	✓	✓	✓
<i>Stratigraphic excavation</i>	Understand the concept of physical and chronological stratigraphy as well as the methods of recording the sequences and be able to remove layers and fills in the correct order for structured excavation.		✓	✓
<i>Artefact recording</i>	Understand how to recover artefacts safely from archaeological deposits, how to store finds on-site and how to complete the Small Finds record.		✓	✓
<i>Context recording</i>	Understand the procedure for the completion of a standard context record sheet using DiggIt.		✓	✓
<i>Survey</i>	Appreciate the concept of site/national grid systems and placement of trenches within this. It is important we know exactly where archaeological remains were found and you will be familiarised with the use of traditional hand tape measurements and in the application of GPS and total station readings.			✓
<i>Measured drawing (planning and section drawing)</i>	Understand the various elements that must be present on a plan and section drawing, including the use of conventions and how the drawing is located.			✓
<i>Photography</i>	Have a basic grasp of the fundamental requirements for camera use and the sequenced methodology of photographic recording.			✓
<i>Sampling</i>	Understand the procedure for the collecting archaeological samples for artefacts and ecofacts, including why we take them, how they are recorded and what happens next.			✓

Table 9: Field school core learning curriculum

## National Occupational Standards

All our training programmes are built upon the framework of National Occupational Standards (NOS) developed by the Chartered Institute of Archaeologists. The NOS for archaeological practice defines the range of skills that archaeologists may need to perfect in order to do their job. They provide the perfect framework for training programmes as they break down a complicated job into a collection of individual skills and tasks. This is great for both practising and avocational archaeologists as it provides a clear roadmap for skills development.

The individual NOS standards which this course supports below are detailed below. If a participant would like to record their own skills development, we recommend they use the Archaeology Skills Passport. This has been developed in line with NOS, and provides a simple record book of your learning achievements.

The learning outcomes from this course are defined using National Occupational Standards (NOS). This course *supports* and *contributes* to the Knowledge Requirements for particular units within the NOS for Archaeological Practice. These are:

AC5 Contribute to intrusive investigations

<https://www.ukstandards.org.uk/PublishedNos-old/CCSAPAC5.pdf>

This includes:

- Preparing for operations, including understanding the methods used, the safety arrangements, identifying suitable equipment and applying technical standards
- Undertaking intrusive investigation, including identifying, investigating and recording archaeology and using appropriate tools competently
- Preparing records and schedules, including making accurate records and verifying data

## Recording your archaeology skills

For those participants who are keen to develop their archaeological skills-set, we recommend using the Archaeology Skills Passport to record the skills you learn as you progress. Depending on whether they are joining us for a couple of days or a full week, they will have the opportunity to learn or add to the skills they already have. The course contributes to a number of Core Skills as identified in the Skills Passport, and the table above provides an outline of which should be expected to be achieved during their experience.

## Providing feedback

Once the participant has completed their fieldwork with us, we will ask a couple of additional questions about their experience. This helps us see how much they have learnt while they have been part of our excavations and also makes sure we are doing a great job! If there is anything the participants would like to know or would like to do, they can speak to a member of the team to help facilitate this.

## The Field School Curriculum – what to expect!

### Morning briefing

On the first morning of the participants arrival to site, they will be greeted by the DigVentures welcoming party where members of the team will introduce themselves and their roles. We



will ask them to introduce themselves as well, and ask a little about why they decided to join the dig. All new Venturers will then receive a full project briefing and site induction, while existing Venturers will head out to the trenches to make a start. The project briefing will include a background to the archaeological research, detailing why we are digging the site, what we are hoping to achieve and what our archaeological strategy and methodology is. As part of the site induction, all Venturers will be talked through our site Risk Assessment, where a member of the team will highlight any particular Health and Safety issues or advice.

### **To the trenches!**

When ventures first arrive on site they will receive a full orientation from one of the DigVentures team. This begins with a background to the period we are investigating, re-capping the aims of the dig and the site's significance. They will be shown any relevant aerial maps, previous research and geophysics results of the area. Venturers are then introduced to each trench, where they can see what we've found so far and what we plan to achieve by the end of the dig. They will learn about the tools of the trade, why we excavate and record the way we do and what to do when you find something. Finally, we will run through the day's tasks and what they will be doing while they are on-site.

### **Trowelling 101**

The most important tool in an archaeologist's kit is their trowel. No matter the site there's always plenty of trowelling to be done. This may be the first time a venture has come face to face with archaeology which is still in the ground and yet to be discovered - it's important we get the basics nailed before developing their skills further.

### **Skills and learning**

Learning opportunities will present themselves throughout the day while we are on site and will vary from site to site, depending on what we are investigating, what we have found and what stage the project is at.

If the venture is with us for one day as a minimum they will walk away from site having learnt the following skills:

Skill	Learning outcome
<i>Professional ethics</i>	Can anyone just turn up and dig an archaeological site? Or is there more to it than that?
<i>Site Safety</i>	Be aware of the particular Health & Safety issues on the archaeological project
<i>Small hand tools</i>	Understand the correct use of the trowel and other smaller hand tools including their safe use and maintenance.
<i>Large hand tools</i>	Understand the correct and safe use of larger tools as well as appropriate loading for buckets and wheelbarrows.
<i>Site formation processes</i>	Understand the process of site formation, including fills, layers, structures or natural deposits. Everything is in the ground for a reason and sites come to look the way they do now for a number of different reasons. By the time you leave site you will have a basic understanding of why the site looks the way it does.

Table 10: One day field school learning outcomes

If the venture is with us for two days as a minimum they will walk away from site having learnt the following skills:

Skill	Learning outcome
<i>Professional ethics</i>	Can anyone just turn up and dig an archaeological site? Or is there more to it than that?
<i>Site Safety</i>	Be aware of the particular Health & Safety issues on the archaeological project
<i>Small hand tools</i>	Understand the correct use of the trowel and other smaller hand tools including their safe use and maintenance.
<i>Large hand tools</i>	Understand the correct and safe use of larger tools as well as appropriate loading for buckets and wheelbarrows.
<i>Site formation processes</i>	Understand the process of site formation, including fills, layers, structures or natural deposits. Everything is in the ground for a reason and sites come to look the way they do now for a number of different reasons. By the time you leave site you will have a basic understanding of why the site looks the way it does.
<i>Artefact recovery and recording</i>	Understand how to recover artefacts safely from archaeological deposits, how to store finds on-site and how to complete the Small Finds record. Where possible, participants will also learn how to wash and quantify different artefact types and materials.
<i>Stratigraphic excavation</i>	Understand the concept of physical and chronological stratigraphy as well as the methods of recording the sequences and be able to remove layers and fills in the correct order for structured excavation.
<i>Context recording</i>	Understand the procedure for the completion of a standard context record sheet using DiggIt.

Table 11: Two days field school learning outcomes



If the venture is with us for a week or more as a minimum they will walk away from site having learnt the following skills:

Skill	Learning outcome
<i>Professional ethics</i>	Can anyone just turn up and dig an archaeological site? Or is there more to it than that?
<i>Small hand tools</i>	Understand the correct use of the trowel and other smaller hand tools including their safe use and maintenance.
<i>Large hand tools</i>	Understand the correct and safe use of larger tools as well as appropriate loading for buckets and wheelbarrows.
<i>Site formation processes</i>	Understand the process of site formation, including fills, layers, structures or natural deposits. Everything is in the ground for a reason and sites come to look the way they do now for a number of different reasons. By the time you leave site you will have a basic understanding of why the site looks the way it does.
<i>Artefact recovery and recording</i>	Understand how to recover artefacts safely from archaeological deposits, how to store finds on-site and how to complete the Small Finds record. Where possible, participants will also learn how to wash and quantify different artefact types and materials.
<i>Stratigraphic excavation</i>	Understand the concept of physical and chronological stratigraphy as well as the methods of recording the sequences and be able to remove layers and fills in the correct order for structured excavation.
<i>Context recording</i>	Understand the procedure for the completion of a standard context record sheet using DiggIt.
<i>Survey</i>	Appreciate the concept of site/national grid systems and placement of trenches within this. It is important we know exactly where archaeological remains were found and you will be familiarised with the use of traditional hand tape measurements and in the application of GPS and total station readings.
<i>Measured drawing (planning and section drawing)</i>	Understand the various elements that must be present on a plan and section drawing, including the use of conventions and how the drawing is located.
<i>Photography</i>	Have a basic grasp of the fundamental requirements for camera use and the sequenced methodology of photographic recording.
<i>Sampling</i>	Understand the procedure for the collecting archaeological samples for artefacts and ecofacts, how to record them, why we take them and what happens next.

Table 12: One week or more field school learning outcomes

## APPENDIX 3 DATA MANAGEMENT PLAN

### Section 1: Project Administration

<b>Project ID / OASIS ID</b>
<ul style="list-style-type: none"> <li>▪ Project code: SUD25</li> <li>▪ OASIS ID: digventu1-506154</li> </ul>
<b>Project Name</b>
<ul style="list-style-type: none"> <li>▪ Sudeley Castle and Gardens Community Excavation</li> </ul>
<b>Project Description</b>
<p>Community archaeology project</p> <ul style="list-style-type: none"> <li>▪ Targeted excavation.</li> <li>▪ Photogrammetric survey of the excavation</li> <li>▪ Earth resistivity geophysical survey</li> <li>▪ Community outreach and engagement</li> </ul>
<b>Project Funder / Grant reference</b>
<ul style="list-style-type: none"> <li>▪ Project funder: Crowdfunded</li> <li>▪ Client: Sudeley Estate</li> </ul>
<b>Organisations</b>
<ul style="list-style-type: none"> <li>▪ DigVentures – lead archaeological contractor</li> </ul>
<b>Project Executive</b>
<ul style="list-style-type: none"> <li>▪ Lisa Westcott Wilkins, Projects Executive, DigVentures</li> </ul>
<b>Project Manager</b>
<ul style="list-style-type: none"> <li>▪ Stephanie Duensing, Project Manager, DigVentures</li> </ul>
<b>Data Contact Person</b>
<ul style="list-style-type: none"> <li>▪ Jasmine Tomys, Post Excavation Officer, DigVentures</li> </ul>
<b>Date DMP created</b>
<ul style="list-style-type: none"> <li>▪ 21/07/2023</li> </ul>
<b>Date DMP last updated</b>
<ul style="list-style-type: none"> <li>▪ 15/08/2025</li> </ul>
<b>Version</b>
<ul style="list-style-type: none"> <li>▪ Version 1.1</li> </ul>
<b>Related data management policies</b>
<ul style="list-style-type: none"> <li>▪ ADS Guides for Good Practice</li> <li>▪ ClfA Standards and guidance for Archaeological Archives, including AAF and Arches guidance documents</li> <li>▪ Work Digital / Think Archive – AAF / ClfA data management guidance document</li> </ul>

### Section 2: Data Collection

The following table outlines the types of files we will collect, and an estimate of the selected data archive.

Type	Format	Estimated volume of Data Archive
Spreadsheets	Excel (.xlsx)	<p>3 spreadsheets objects (size &lt;2MB total):</p> <ul style="list-style-type: none"> <li>▪ Context Register / Finds &amp; Samples Register / Photo Register / Drawing Register</li> <li>▪ Context descriptions and data</li> <li>▪ Specialist data tables</li> </ul>

Type	Format	Estimated volume of Data Archive
Text / documents	Word (.docx)	9 word documents (size <100MB): <ul style="list-style-type: none"> <li>▪ Project Design</li> <li>▪ Post excavation Assessment</li> <li>▪ Final Technical Report</li> <li>▪ Individual Specialist Reports x 6</li> </ul>
Vector graphics	Scalable Vector Graphics (.svg)	Site drawings x 10, av size 5MB
Images	Uncompressed (.tiff) Lossy graphics file (.jpg)	Archive shots x 60, av size 4MB Finds photos x 30, av size 4MB Orthoimages x 3, av size 10MB
GIS	ESRI Shapefile (.shp & .shx & .dbf, plus associated files) GeoTIFS	6 shp layers <10MB 2 GeoTIFS, av size 5MB
Survey	Comma Separated Version (.csv)	Survey data x 1, av size <1MB
Photogrammetry	Models hosted on Sketchfab (.obj, .jpg, .mtl)	3D models x 3, 20MB
Geophysics		1.3 Ha

How will the data be collected or created?
<p><i>Data Standards / Methods</i></p> <ul style="list-style-type: none"> <li>▪ Standard methods of data collection will be applied throughout the project, working to best practice guidance where applicable / available. In general, data acquisition standards are defined against <i>ADS Guides to Good Practice</i>. Specific or additional guidance relevant to this project are listed below, and will be updated as the project progresses.</li> <li>▪ Methods of collection are specified within the Project Design (this document) and will meet the requirement set out in the organisation recording manual and relevant ClfA Standards and Guidance.</li> <li>▪ Where appropriate, project contributors external to the organisation will be required to include data standards, collection methodology and metadata with individual reports and data.</li> <li>▪ Specific guidance: <ul style="list-style-type: none"> <li>– HE <i>Digital Image Capture and File Storage: Guidelines for Best Practice 2015</i></li> <li>– HE <i>Photogrammetric Applications for Cultural Heritage: Guidance for Good Practice 2017</i></li> <li>– HE <i>EAC guideline documents 2016</i></li> <li>– ClfA <i>Standard and Guidance for archaeological geophysical survey 2014</i></li> </ul> </li> </ul> <p><i>Data storage / file naming</i></p> <ul style="list-style-type: none"> <li>▪ The working project archive will be stored in a project specific folder or data specific folder on the internal organisational server. The internal organisation server is</li> </ul>

How will the data be collected or created?

backed up twice daily to maintain an up to date security copy of the organisation wide data.

- Project folders are named following established organisational procedures.
- Data collected will be downloaded and raw data will be stored in the appropriate folder.
- File naming conventions following established organisational procedures, based on ADS file naming guidance, and include version control management.
- All files included as part of this project archive will include an organisational identifier (DV), the Site ID (SUD25), the file descriptor (eg ProjectDesign) and Version number (eg v2.0).

*Quality Assurance*

- Instruments used in the collection of data are calibrated prior to use and checked to ensure they are in full working order.
- All site records and data collected will be checked during project delivery.
- Data collection and management are reviewed regularly as part of the organisational Quality Policy (DV\_Quality\_Policy\_v1.pdf). This includes a quarterly review of internal project folders to ensure our organisational data management standards are being met.

**Section 3: Documentation and metadata**

What documentation and metadata will accompany the data?

- Data collected will include standard formats which maximise opportunities for use and reuse in the future (see Section 2, above).
- A Collection Level Metadata Summary will be completed as the project is delivered. A working copy will be kept on the organisational server in the Project Folder. The Collection Level Metadata Summary brings together the overarching project details and includes a register of data types and number of objects included in the archive, along with all other archive components.
- Metadata tables for each data type will be populated as the project progresses and will use the standard format for each data type as recommended by ADS.
- Data documentation will meet the requirement of Digital Repository Guidelines, following the methodology described in the Project Design methodology.

**Section 4: Ethics and legal compliance**

How will you manage any ethical, copyright and Intellectual Property Rights (IPR) issues?

- The project archive will include the names and contact details of individuals who intend to volunteer or participate in the excavation and post excavation stages. We have a GDPR compliant Privacy Policy which underpins the management of personal data; any personal data is managed through a secure cloud-based database and not retained on the project specific folders.
- Personal data will be removed from the archaeological project archive and permission to include individual's names in any reporting is gained prior to use.
- Where formal permissions and/or license agreements are linked to data sharing, they will be included in the project documentation folders and will accompany the archaeological project archive.

## Section 5: Storage and Backup

How will the data be stored, accessed and backed up during the research?

- Organisational IT is managed internally by the Projects Director and Data Management Manager, who is also responsible for the management and verification of our back-ups and who supports access to security copies as needed.
- Sufficient data storage space is available via the organisational server, which includes two-factor authentication and permissions-based access. The server is accessible by staff on- and off-site through a secure log-in.
- Off-site access to the project files on the organisation’s server is provided to support back-up of raw data while fieldwork is ongoing. Where internet access for data back-up is not possible, the raw data will be backed up to a separate media device (such as laptop and portable external hard drive).
- Project files will be shared with external specialists and contractors directly using the same system, with the wider project team gaining access to only the files needed using permissions-based access.

## Section 6: Selection and Preservation

Which data should be retained, shared, and/or preserved?

- The Selection Strategy and DMP will be reviewed and updated as part of the Post Excavation Assessment and Updated Project Design, and following full analysis. Updated documentation will be included in all reporting stages.
- Prior to deposition, the Selection Strategy and DMP will be updated and finalised in agreement with all project stakeholders (including the HE, Wakefield Metropolitan District Council, Museum, ADS).
- Selection will be informed by the Project Design, defined against the research aims, regional and national research frameworks, specialist advice and the significance of the project results.
- The project results are likely to provide new research data which can be included in the Historic Environment Record and will contribute to the knowledge of the early medieval period at the site, and aiding the future management of the archaeological site.
- The data archive will be ordered, with files named and structured in a logical manner, and accompanied by relevant documentation and metadata, as outlined in Sections 2 and 3 of this DMP.

What is the long-term preservation plan for the dataset?

- The digital archive will be deposited with the Archaeology Data Service, which is a certified repository with CoreTrustSeal. If the repository is updated this will be to an appropriate alternative as decided with discussion with the stakeholders. The DMP will be updated, and the intended repository will be updated and provided the DMP.
- The archive will be prepared for deposition by the project team and the costs for the time needed for preparation, and the cost of deposition have been included in the project budget (SUD25 Internal Cost V1.0).

Have you contacted the data repository?

- At this stage a Data Management Plan has created and the digital archive will be contacted at the end of the project.

Have the costs of archiving been fully considered?

- A costing estimate has been produced using the ADS Costing Calculator and sufficient resources to cover these costs, and to allow for the preparation of the archive, have been included in the project budget.
- The costing estimate is based on the estimated project archive shown in the table above (Section 2), and £400 has been ringfenced in the project budget for digital data deposition with ADS.

## Section 7: Data Sharing

### How will you share the data and make it accessible?

- A summary of the project will be included and updated on the OASIS Index of Archaeological Investigation as the project progresses.
- The investigations are likely to result in a number of documents: Project Design, Post Excavation Assessment and Updated Project Design, Final Report, Journal submission.
- The final report is expected to be completed within 18 months of the completion of fieldwork.
- As the project progresses reports will be attached to the project OASIS record and added to DigVentures website.
- A final version of the project report will be supplied to the Historic Environment Record via OASIS, and any data which they request can also be provided directly.
- The location(s) of the final Archaeological Archive will be added to OASIS when appropriate.
- The digital repository will disseminate the digital elements of the Archaeological Archive online under a creative commons licence and the dataset will receive a DOI.

### Are any restrictions on data sharing required?

- A temporary embargo may be required on the sharing of the project results. If this is the case, specific details once agreed will be included in the updated version of this DMP and will be documented in the overarching Project Collection Metadata.
- Data specific requirements, ethical issues or embargos which are linked to particular data formats will be documented within the relevant metadata tables accompanying the project archive.

## Section 8: Responsibilities

### Who will be responsible for implementing the data management plan?

- The Project Manager will be responsible for implementing the DMP, and ensuring it is reviewed and revised at each stage of the project.
- Data capture, metadata production and data quality is the responsibility of the Project Team, assured by the Project Manager.
- Storage and backup of data in the field is the responsibility of the field team.
- Once data is incorporated into the organisations project server, storage and backup is managed by the Projects Director and Director of Operations.
- Data archiving is undertaken by the project team under the guidance of the Programme Manager, who is responsible for the transfer of the Archaeological Project Archive to the agreed repository.
- Details of the core project team can be found in the Project Design.