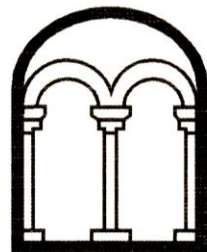


**JOHN O'GAUNT GOLF COURSE
SUTTON PARK
SUTTON
SANDY
BEDFORDSHIRE**

**ARCHAEOLOGICAL STRIP, MAP
AND RECORD EXCAVATION,
ANALYSIS AND PUBLICATION**

Albion
archaeology



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**ARCHAEOLOGICAL STRIP, MAP
AND RECORD EXCAVATION,
ANALYSIS AND PUBLICATION**

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Compiled by	Checked by	Approved by
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Produced for:
Gaunt Golf Design Ltd

On behalf of
John O’Gaunt Golf Course



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Preface

All statements and opinions in this document are offered in good faith. This document has been prepared for the titled project or named part thereof and was prepared solely for the benefit of the client. The material contained in this report does not necessarily stand on its own and should not be relied upon by any third party. This document should not be used for any other purpose without an independent check being carried out as to its suitability and the prior written authority of Albion Archaeology (a trading unit of Central Bedfordshire Council). Any person/party relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Albion Archaeology for all loss or damage resulting therefrom. Albion Archaeology accepts no responsibility or liability for this document to any party other than the persons/party by whom it was commissioned. This document is limited by the state of knowledge at the time it was written.

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The project was monitored on behalf of the Local Planning Authority by Martin Oake, Central Bedfordshire Council Archaeologist. The fieldwork was undertaken by Tori Guy (Project Supervisor), under the direction of Jo Barker (Project Officer) and Jeremy Oetgen (Project Manager). This report has been prepared by Tori Guy. Advice on the significance of the peat deposits was received from Dr Michael J Allen, MCIfA, FLS, FSA (Allen Environmental Archaeology). The figures have been produced by Joan Lightning (CAD Technician). All Albion projects are under the overall management of Drew Shotliff (Operations Manager).

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Key Terms

Throughout this project design the following terms or abbreviations are used:

BARS	Bedfordshire Archives and Records Service
CBC	Central Bedfordshire Council
CBCA	Central Bedfordshire Council Archaeologist



CIfA	Chartered Institute <i>for</i> Archaeologists
BGL	Below ground level
HER	Central Bedfordshire and Luton Historic Environment Record
LPA	Local Planning Authority
NHLE	National Heritage List for England
NPPF	National Planning Policy Framework
PDA	Permitted development area
SARM	Scheme of Archaeological Resource Management



Non-Technical Summary

Gaunt Golf Design Ltd, acting on behalf of John O'Gaunt Golf Course, obtained planning permission (CB/17/02167/FULL) to remodel and raise the tee, fairway and landing area on the 4th Hole at John O'Gaunt Golf Course using excavated subsoil material from the adjacent (new) pond feature and flood plain compensation.

The planning application was supported by a heritage statement, which highlighted that there was a moderate to high potential of uncovering sub-surface archaeological remains associated with the medieval settlement of Sutton and the 16th-century landscaped Sutton Park. The permitted development area (PDA) also lies within the setting of the scheduled monument of John O'Gaunt's Hill (NHLE 1005403), situated immediately to the west.

In light of this, the Central Bedfordshire Council Archaeologist (CBCA) advised that a Strip, Map and Sample (SMS) and Watching Brief were required to ensure that the impact of the proposals on the heritage assets could be properly controlled.

Fieldwork took place between 11th September and 15th November 2017. Initial groundworks comprised the removal of turf in Areas B and C. Excavation below this depth only occurred in the footprint of the new pond in Area B, where a layer of topsoil and make-up material was encountered. Below these was an extensive layer of peat that overlay the undisturbed natural geology, situated 1.5m below ground level (c. 29.6m OD).

A similar sequence of layers was also encountered in Area A, but the peat was left in situ. No excavation below the turf-line occurred in Area C, as the ground surface was raised using material extracted from Area A. Therefore, any sub-surface archaeological remains that might survive in this area will have been preserved in situ.

Evidence of past human activity was only encountered in Area B and comprised two undated features, a ditch [7] and a tree-throw [5], which had been dug into the surface of the peat layer. Below the peat part of a possible paleo-channel [12] was also identified.

No archaeological features or deposits associated with the medieval John O'Gaunt's Hill were identified and the relatively shallow depth of the topsoil and the presence of substantial layers of landscaping make-up material indicate that the PDA has been heavily altered during the post-medieval and modern periods. The medieval pottery recovered from make-up layers in Area A was abraded and is considered to be residual. The tree-throw and ditch identified in Area B may represent tree-removal as part of the golf course landscaping and drainage.

The peat encountered in Areas A and B must have been formed in constantly waterlogged conditions on the floodplain of the Potton Brook. However, given the limited extent of the present works it was not possible to say whether this waterlogging occurred simply as the result of seasonal flooding and a high water table or whether there might once have



been an artificial lake in the area. The brook follows a NE-SW course between Areas A and B and further along its course peat has been identified during minor groundworks within the golf course (Nigel Broadwith pers. comm.).

The discovery of a possible palaeochannel in Area B indicates that the course of Potton Brook has meandered over time, so the wide flood plain could simply be a natural formation.

The results of the fieldwork indicate that the PDA does not contain evidence of human activity pre-dating the post-medieval/modern periods. The make-up layers and features identified in Areas A and B are most likely to be modern in date and do not have the potential to address local and regional research objectives.

The peat deposits beneath the make-up layers on the other hand are potentially of considerable archaeological interest. However, reliable dating and analysis of extensive landscape-scale deposits is best undertaken as part of a carefully formulated strategic sampling programme and the present investigation was not of sufficient scale to be able to deliver this. Furthermore, the works undertaken have had negligible impact on the peat and the development will not lead to any drainage or reduction in water table likely to threaten its continued preservation.

The project archive will be deposited with The Higgins Art Gallery & Museum, Bedford (entry no. BEDFM: 2017.66). Details of the project and its findings will be submitted to the OASIS database (reference no.: albionar1-291805) in accordance with the guidelines issued by Historic England and the Archaeology Data Service.



1. INTRODUCTION

1.1 *Project Background*

Gaunt Golf Design Ltd, acting on behalf of John O'Gaunt Golf Course, obtained planning permission (CB/17/02167/FULL) to remodel and raise the tee, fairway and landing area on the 4th Hole at John O'Gaunt Golf Course, Sutton Park, Sutton, Sandy, Bedfordshire, SG19 2LY.

The planning application was supported by a heritage statement (Albion 2016), which highlighted that there was a *moderate to high* potential of uncovering sub-surface archaeological remains associated with the medieval settlement of Sutton and the 16th-century landscaped Sutton Park. The permitted development area (PDA) also lies within the setting of the scheduled monument of John O'Gaunt's Hill (NHLE 1005403), situated immediately to the west (Figure 1).

Consequently the following condition was attached to the planning permission granted on 10th July 2017:

Condition 2

No development shall take place until a written scheme of archaeological resource management; that includes provision for post excavation analysis and publication, has been submitted to and approved in writing by the Local Planning Authority. The development hereby approved shall only be implemented in full accordance with the approved archaeological scheme.

Reason: To record and advance understanding of the heritage assets with archaeological interest which will be unavoidably affected as a consequence of the development. This condition is pre-commencement as a failure to secure appropriate archaeological investigation in advance of development would be contrary to paragraph 141 of the National Planning Policy Framework that requires developers to record and advance of understanding of the significance of any heritage assets to be lost (wholly or in part) as a consequence of the development.

In light of this, the Central Bedfordshire Council Archaeologist (CBCA) advised that an archaeological strip, map and record excavation (SMR) was required to ensure that the impact of the development proposals on the heritage assets could be properly controlled. The advice was in accordance with the *National Planning Policy Framework* (DCLG 2012) (see Section **Error! Reference source not found.**). Prior to the commencement of works Albion submitted a Scheme of Archaeological Resource Management (SARM; Albion 2017b) to the CBCA, which contained a methodology of archaeological works. Historic England's Inspector of Monuments was also consulted to ensure the correct measures were taken to protect the scheduled site of John O' Gaunt's Hill.



1.2 Site Location and Description

The PDA lies in the John O'Gaunt Golf Course, Sutton Park, Sutton, Sandy, Bedfordshire, SG19 2LY, on the northern edge of Sutton (Figure 1). The golf course is bisected by Biggleswade Road, which links Potton, 2.5km to the north, and Biggleswade, 4km to the south-west. The market town of Sandy lies 5km to the west.

The PDA is centred on TL 22157 47625 and comprises three separate locations on the 4th Hole, in the south-east corner of the golf course (Figure 1; Areas A, B and C). The area of proposed development comprised a fairway, landing area and green, separated from the tee by the Potton Brook. The height of the PDA ranges from c. 31–32m OD, with the lowest point being along the course of the Potton Brook in the centre of the 4th Hole.

The underlying geology comprises Woburn Sand Formation Sandstone. The overlying superficial deposits comprise alluvial clay, silt, sands and gravels associated with the Potton Brook¹.

1.3 Archaeological Background

The archaeological and historical background of the PDA was discussed in the heritage statement produced in support of the application (Albion 2016). The most salient information is reproduced below.

1.3.1 Prehistoric and Roman

Prehistoric activity in the vicinity of the PDA comprises flint cores and flakes (HER 4472), of possible Mesolithic origin, found behind the vicarage c. 200m south-west of the PDA. Several Mesolithic flints (HER 4476), including a flint core and possible flakes, were also found to the north of Sutton School, c. 180m south-east of the PDA.

A number of later prehistoric and /or Roman dated cropmarks have been identified over c. 500m to the north-east (HER 2941) and south-west (HER 9098) of the PDA. The possible existence of a burial mound within the study area has been indicted by the name 'Wenslow' (HER 793) found in association with Sutton. Its exact location is unknown.

1.3.2 Medieval

Sutton is mentioned in eleven entries in Domesday Book² and it is likely that a settlement was already in existence by 1066. At the time of the Domesday survey in 1086 the principal landholder in Sutton was Countess Judith, who held six hides (Page 1908, 246–51). It is recorded as being a medium-sized holding, comprising twenty householders.

The PDA is situated c. 100m north of the medieval village of Sutton (HER 17165). The earliest extant medieval building in Sutton is the grade I listed All Saints' Church

¹ <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> [accessed 20/11/2017]

² <http://opendomesday.org/place/TL2147/sutton/>



(NHLE1138081), situated *c.* 200m south-west of the PDA. It has 13th-century origins, but was reworked and extended in the following centuries. The site of a Holy Well (HER 4546) has been recorded in the grounds of the Rectory, *c.* 240m north-east of the PDA. According to the unpublished 1918 ‘Annals of a County Parish’ (BARS ref: CRT 130 SUT 1), this marked the location of the ‘original’ church, but no evidence has yet been found to support this assertion. Three extant houses of late medieval origin (16th-century) are situated within the vicinity of the church and comprise The Old Rectory (NHLE1114085), Church Farmhouse (NHLE1321629) and Brook House (NHLE1138152) at 1 High Street.

Packhorse Bridge is the only other extant medieval structure in the study area and is a scheduled monument (NHLE 1004501). The bridge is situated *c.* 200m south-west of the PDA and straddles the Potton Brook that flows across John O’Gaunt Golf Course. The bridge is situated adjacent to Sutton Ford (HER 5093), considered to be of Saxon origin. It is constructed of ironstone, with dressed limestone parapets. The first mention of the bridge is in 1504 when Thomas Loffe left 3s 4d towards its upkeep (Simco *et. al.* 1997, 74–5). The two arches in the bridge design are of 14th- to 15th-century appearance, but 18th-century additions are also present. When it was repaired in 1986 it was found to rest on a timber foundation raft. Radiocarbon dating of the timbers produced a mid-13th-century date for the felling of the elm trees. The original bridge would have been more of a hump-backed design, but at some stage the height was reduced and the approach ramps extended (*ibid.*). Simco and McKeague have argued that the current bridge design was not created ‘...specifically for use by packhorses engaged in long distance trade, as there were never any important routes through the village, and local markets were better served by other roads’ (1997, 75–6). It is believed to have been constructed as part of the creation of Sutton Park in the late 16th century and most likely provided an attractive feature on the edge of the new park. The presence of 13th-century timbers, however, suggests that an earlier bridge structure must have existed prior to the surviving one.

The scheduled monument of John O’Gaunt’s Hill (NHLE 1005403/HER 510) is situated immediately west of the PDA. It comprises a wide ditch encompassing an oval-shaped mound that stands 4.5m high. Wadmore’s account of the monument in 1920 stated that the natural slope of the land to the east and south meant that the ditch on the west and north side was much deeper than to the south-east where there was no scarp to the ditch as it ‘dies into ground level’ (1920, 173). The current access to the mound is via two causeways across the ditch on the western and northern sides, but it is unclear whether these represent original entrances. Most likely they were constructed as part of the landscaping of Sutton Park — the northern entrance would have faced the Elizabethan house.

Based on its shape and proximity to the church and village, the earthwork could be the remains of a medieval, oval motte or moated site. In 1066 land in Sutton was held by seventeen freemen, and their low rank makes it unlikely that John O’Gaunt’s Hill



predates 1066³ (Lowerre 2005, 223). In addition, no mention of a castle is made in the landholdings of this time (Petrie 2012, 77). It is more likely to have been constructed sometime after the 12th century when the gradual consolidation of Sutton Manor took place (Page 1908). Petrie has also suggested that it may have been created as a landscape feature in the 16th-century Sutton Park (2012, 77).

The location of medieval fishponds (HER 4446) has been recorded on part of the PDA and *c.* 40m east of John O'Gaunt's Hill. They later became ornamental lakes, but have since been drained. Extensive and complex linear and rectilinear earthworks have also been identified within the golf course (HER 11767) and some of these probably relate to the medieval pre-emparkment landscape. The main area of potential medieval features is situated *c.* 460m to the north of the PDA, close to the boundaries of Potton.

Two hollow-ways (HER4468 and HER 4470) of possible medieval origin have also been recorded on the golf course, at least *c.* 230m west of the PDA. The more extensive hollow-way (HER 4468) is north-south aligned and extends northwards from All Saints' Church for *c.* 350m.

1.3.3 Post-medieval

The PDA lies within the former Sutton Park (HER 7005), landscaped by the Burgoyne family in the early post-medieval period and comprising of 60ha. It originally surrounded the Elizabethan Sutton Manor House (HER 515), which burnt down in 1825. By 1838 it had been replaced by a new house to the north-west, now the golf clubhouse (HER 14469). Since its creation Sutton Park has contained ornamental lakes, a boathouse (HER 4439), waterfall and footbridge (HER 4450) and dove house (HER 4455). To the north of the former house, *c.* 360m north-west of the PDA, lies Summerhouse Hill (HER 4452), a landscaped feature in the park.

1.4 Project Objectives

The primary function of the archaeological investigations was to determine and understand the nature, function and character of any archaeological remains in their cultural and environmental setting.

To achieve the above, the data collected during the fieldwork aimed to determine the following:

1. the date, nature and extent of any activity or occupation within the development site;
2. the relationship of any remains found to the surrounding contemporary landscapes;
3. the local environmental conditions (through the recovery of palaeo-environmental remains).

³ <http://opendomesday.org/place/TL2147/sutton/>



In addition to the primary aims of the fieldwork, wider research objectives were formulated based upon the archaeological remains expected and these were linked to existing research strategies. Details of the national and regional research frameworks are set out in the SARM (Albion 2017b) produced prior to the commencement of groundworks.

The proposed development had the potential to reveal archaeological remains associated with the medieval settlement of Sutton and its historical environs, along with the post-medieval development of Sutton Park. This was most likely to be in the form of backfilled ditches and pits, potentially associated with domestic or landscaping activities.

Site-specific objectives were based on the local and regional research frameworks. The statement of significance in the SARM highlighted some of the research priorities that potential heritage assets on the PDA had the potential to address. In general, research objectives fell under the following headings:

- Medieval fishponds and moated sites

The potential survival of sluices, other water management systems and organic artefacts and ecofacts (Edgeworth 2007, 102).
- Medieval mottes and moated sites

A range of medieval mottes and moated sites exist in Bedfordshire. They are found in a variety of locations and constructed for a variety of reasons (Edgeworth 2007, 98–102). It is important to establish how these sites fit into the village layout and to consider the potential for structures and features to exist on the outside of the motte or moat (Edgeworth 2007, 100).
- Parks and gardens

The use of survey to record the shifting layout of parks and gardens, record the loss and decline of trees and manor houses and to identify earlier landscapes and features (Medlycott 2011, 79).



2. METHODOLOGY

The methodological approach to the project is summarised below. A full methodology is provided in the SARM (Albion 2017b).

2.1 *Methodological Standards*

The standards and requirements set out in the following documents were adhered to throughout the project: (English Heritage was renamed Historic England in March 2015, but not all guidelines have been updated yet and are therefore still referenced as English Heritage where appropriate.)

- Albion Archaeology *Procedures Manual: Volume 1 Fieldwork* (2nd edn, 2001).
- ALGAO (East) *Standards for Field Archaeology in the East of England* (Gurney 2003)
- Archaeological Archives Forum *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation* (Brown 2007)
- The Higgins Art Gallery & Museum) *Procedure for Preparing Archaeological Archives for Deposition with Registered Museums in Bedfordshire. Version 2.8* (2010).
- CIfA *Charter and By-law and Code of Conduct*
Standard and guidance for an archaeological watching brief
Standard and guidance for archaeological excavation
Standard and guidance for the collection, documentation, conservation and research of archaeological materials
- Historic England/
English Heritage *Management of Research Projects in the Historic Environment (MoRPHE) Project Managers' Guide* (updated 2015)
Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation (Campbell *et al.* 2011)

The project archive will be deposited at The Higgins Art Gallery & Museum, Bedford (accession no. BEDFM 2017.66). Details of the project and its findings will be submitted to the OASIS database (reference no.: albionar1-291805) in accordance with the guidelines issued by Historic England and the Archaeology Data Service.

2.2 *Archaeological Methodology*

2.2.1 *General methodology*

A strip, map and record excavation and watching brief took place between 11th September and 15th November 2017. Prior to the commencement of the groundworks



a 10m-wide protection zone was marked around John O' Gaunt's Hill and fenced to prevent plant entering that area.

All groundworks were carried out by a mechanical excavator fitted with a flat-edged bucket and operated by an experienced driver, under close archaeological supervision.

All excavation and recording was carried out by experienced Albion staff with internal and external specialists also consulted. Any potential archaeological features were investigated by hand and recorded using Albion Archaeology's *pro formae* sheets. Archaeological features were subsequently drawn and photographed as appropriate. The archaeological investigation areas were inspected by the CBCA prior to reinstatement works.

2.2.2 Area-specific groundworks methodology

Within Area A the removal of overburden was carried out to the top of the peat layer. The peat layer was not excavated and remains *in situ*.

Initial groundworks in Area B comprised the removal of turf across the entire area. Excavation below this level only occurred in the area of the new pond footprint and undisturbed deposits were encountered at 0.6m below ground level (BGL).

Area C comprised the removal of turf and then was built up with the soil removed from Area A. No archaeological features or layers were observed during turf removal. Any such features that may survive in Area C remain *in situ*.

2.3 Publication Methodology

On 19th September 2017 the CBCA agreed that the archaeological remains and deposits encountered during the archaeological investigations were not of a sufficient scale to warrant full analysis and subsequent publication. It was further agreed that the results of the investigations should take the form of a 'client report'; in accordance with Section 5.7 of the SARM (Albion 2017b, 23).

2.4 Recording the Condition of the Monument and Changes to its Setting

A comprehensive photographic record of the condition of John O'Gaunt's scheduled monument and its setting was made in April 2017, during preparation of the heritage statement for the planning application (Albion Archaeology 2017a, fig. 10 and pls. 16 and 9–23). The SARM specified that on completion of the proposed works, a second photographic survey would be undertaken by Albion Archaeology, using the same viewpoints where possible (Figure 5; Albion Archaeology 2017b; plates 9-23). This will serve to record the changes to the monument and its setting.

The second photographic survey was undertaken in February 2018 when the vegetation had begun to recover. These photographs are included in the present report, alongside those taken in 2017 (Plates 10-24).



3. RESULTS OF FIELDWORK

3.1 Introduction

All deposits revealed are summarised below. Context numbers in square brackets [***] represent a cut feature, whereas those in round brackets refer to fills or layers (***)).

Initial groundworks in Areas B and C comprised the removal of turf across the entire area. Excavation below this level only occurred in the area of the new pond in Area B, which was eventually excavated to the natural geological stratum, 1.5m below ground level (BGL). Area A comprised the removal of scrub and young trees, followed by the removal of overburden to the top of the natural geological stratum.

3.2 Overburden and Geological Deposits

Within Areas A and B a similar overburden of loose dark greyish brown sand-silt topsoil (1) and (14), c. 0.15m thick, was encountered. This overlay a 0.3m-thick landscaping make-up layer (2) and (15) of orangey brown sand-silt. Within Area A there was a second make-up layer (16) that comprised a mid-orangey yellow sand-silt.

The natural geological stratum was only exposed within the centre of the new pond footprint in Area B and comprised firm blue clay and a friable brownish orange gravel. This was as expected and derived from alluvial layers associated with Potton Brook.

A number of peat layers (3, 4, 9 and 10) were exposed during the excavation; they are described in detail within Sections 3.3 and 3.4.

3.3 Area A

Area A was c. 0.5ha in size and comprised an area of scrubland and trees, bisected by a modern, east-west aligned drainage ditch.

Following scrub clearance, three layers were observed during the removal of overburden: topsoil (14) and two make-up layers (15) and (16) (Plate 1).

Below these layers a dark greyish brown peat layer (17) was observed (Plate 2). No archaeological features were identified within this peat deposit and it was left *in situ*.

Datable artefacts were only present in make-up layer (15) and consisted of six abraded, sand-tempered, medieval pottery sherds (96g). These comprised a 12th–



13th-century body sherd (fabric C59B⁴) and five sherds deriving from a single jar (fabric E01D) of 14th–15th-century date.

3.4 Area B

Area B comprised alterations to the fairway of the 4th Hole, which involved raising of the ground level and excavation of a new, large, kidney-shaped pond. Material extracted from the new pond was used to build-up the remaining ground surface of Area B.

Following the removal of turf in Area B, topsoil (1) and landscaping make-up layer (2) were removed from the new pond footprint. These layers were comparable to topsoil (14) and make-up layer (15) identified in Area A.

A deposit of peat (3) was revealed underlying make-up layer (2), which, when fully exposed, extended beyond the footprint of the new pond. With the agreement of the CBCA a machine trench (16m long and 2m wide), was dug across the width of the new pond to establish the depth and nature of the peat deposit (Figure 2). This trench revealed three distinct layers of peat (3, 4 and 9) and a basal layer of waterlogged peaty-silt (10) (Figure 2 and Plates 3 and 4), with a total thickness of 1.15m. A summary of these layers is provided in Table 1 below. A significant quantity of waterlogged vegetation was preserved within the peat deposits, including grass associated with buried topsoil and brushwood from flooding episodes. To further investigate this material, three paleo-environmental column samples were taken, along the length of the trench (Figure 2).

Context	Thickness	Description
3	0.23m	Spongy dark greyish brown peat, containing brushwood debris
4	0.27m	Spongy mid brownish green peat, containing large a quantity of grassy vegetation
9	0.44m	Spongy mid greenish grey peat, containing brushwood debris and small quantities of grassy vegetation
10	0.22m	Friable dark bluish grey silty peat

Table 1: Summary of peat layers in Area B

Cut into the surface of the peat were two undated features; a ditch [7] and a tree-throw [5] (Figure 2 and Plates 5 and 6). The ditch was orientated NW-SE and measured *c.* 1.8m wide and *c.* 0.25m deep. It was filled with a dark brownish grey sandy peat. The tree-throw was *c.* 1.4 wide, >1m long and 0.3m deep and filled with a similar peat deposit. Despite the absence of dating evidence, they are both stratigraphically later than the peat and most likely associated with the post-medieval Sutton Park.

⁴ Fabric types defined in accordance with the Bedfordshire Ceramic Type Series.



The natural geological stratum was only encountered in the centre of the new pond footprint (c. 2m BGL/ c. 29.12m OD) where the peat had been entirely removed (Plate 7). The edge of a possible palaeochannel [12], partially sealed beneath the peat, was visible at the base of the pond footprint. This survived as a mottled bluish grey clayey-sand (Figure 2 and Plate 8). An auger test indicated that it was 0.16m thick. It was also sampled at the base of column sample <3> (Figure 2).

3.5 Area C

Area C comprised the raising of the tee for the 4th Hole. Following the removal of the turf the ground level was raised using topsoil and make-up material excavated from Area A (Plate 9). Any potential sub-surface remains were not exposed and remain *in situ*.



4. CONCLUSIONS

4.1 *Summary of the Results of Fieldwork*

The heritage statement (Albion 2017a) produced in support of the planning application highlighted the potential of finding features and deposits in Area A associated with medieval John O’Gaunt’s Hill (NHLE 10054036) and a post-medieval lake and waterfall depicted on 19th-century maps (Figures 3 and 5; HER4446 and HER4450). No associated remains were identified and the relatively shallow depth of the topsoil and the presence of landscaping make-up material indicate that the PDA has been heavily altered during the post-medieval and modern periods. The medieval pottery recovered from make-up layers in Area A was abraded and is considered to be residual.

The initial alteration to the PDA may have occurred during the creation of Sutton Park, c. 1540 (HER7005), which can be seen in detail on the 1820 map of the Lordship of Sutton (Figure 4). More recently, the PDA has been significantly altered as part of its use as a golf course, opened in 1948. The tree-throw and ditch identified in Area B may represent tree-removal as part of the golf course landscaping and drainage.

The peat encountered in Areas A and B must have been formed in constantly waterlogged conditions on the floodplain of the Potton Brook. However, given the limited extent of the present works, it was not possible to say whether this waterlogging occurred simply as the result of seasonal flooding and a high water table or whether there might once have been an artificial lake in the area. The brook follows a NE-SW course between Areas A and B and further along its course peat has been identified during minor groundworks within the golf course (Nigel Broadwith pers. comm.).

The discovery of a possible palaeochannel in Area B indicates that the course of Potton Brook has meandered over time, so the wide flood plain could simply be a natural formation.

It is noted that the map of the Lordship of Sutton features manuscript alterations in pencil (Figure 4), which define a sinuous corridor along the floodplain of the stream. The purpose of these alterations is unclear, but their location suggests some connection with the topography or prevailing conditions on the site.

No archaeological remains pre-dating the post-medieval/ modern periods were encountered during archaeological investigations at John O’Gaunt Golf Club. Whilst it is possible that medieval or earlier archaeological remains could survive beyond the PDA, the extensive layer of peat encountered in Areas A and B indicate that a large swathe of land adjacent to Potton Brook was most likely uninhabitable due to ground water and flooding. The dearth of artefacts from the investigations also



implies an absence of domestic-related activity in the vicinity of the PDA.

4.2 Significance of the Results of Fieldwork

The results of the fieldwork indicate that the PDA does not contain evidence of human activity pre-dating the post-medieval/modern periods. The make-up layers and features identified in Areas A and B are most likely to be modern in date and do not have the potential to address local and regional research objectives.

Dr Michael J Allen was consulted regarding the significance of the underlying peat deposits. Dr Allen was not able to visit the site, but on the basis of photographs and information supplied by Albion Archaeology he advised that the peat is clearly Holocene in date (i.e. less than c. 12,000 years old) and would contain a datable palaeoenvironmental and land-use record. It is in an ideal situation to contain waterlogged wooden or brushwood artefacts and structures, including trackways (e.g. Silvertown see Crockett *et. al.* 2002, 185–213), as indicated by the good to excellent peat preservation with both brushwood and vegetative material. On other sites in London and Eastbourne (East Sussex) brushwood has shown signs of being cut and exploited and used as a resource for trackways or removed for fires).

The present development has not resulted in significant depletion of the archaeological resource and no artefacts have been found in the peat. On that basis no further analysis is necessary for the samples obtained for this project. However, the work has demonstrated the potential of the extensive deposits which remain *in situ*. Should the continued survival of the deposits become threatened in future, one strategy that could be adopted would be to:

- a) have a geoarchaeologist visit site to assess and record the deposits; and
- b) take monolith samples through the deposit and 2- to 5-litre bulk samples at 10–20cm contiguous intervals so it can be backfilled but described and examined.

On this basis, the column samples taken during the groundworks associated with the present development will now be discarded.

4.3 Effects of the Development on John O’Gaunt’s Hill Scheduled Monument

Now that the works are complete it is clear that there have been no permanent detrimental changes to the landscape setting of the scheduled monument as a result of the development (*see* Plates 10–24).

Early indications (Plate 19) suggest that there has been a considerable improvement in the condition of the north-eastern edge of the monument. Here the development has allowed for redirection of golf course vehicles away from the outer edge of the moat, allowing turf cover to regenerate and reducing the potential for erosion of the earthwork.



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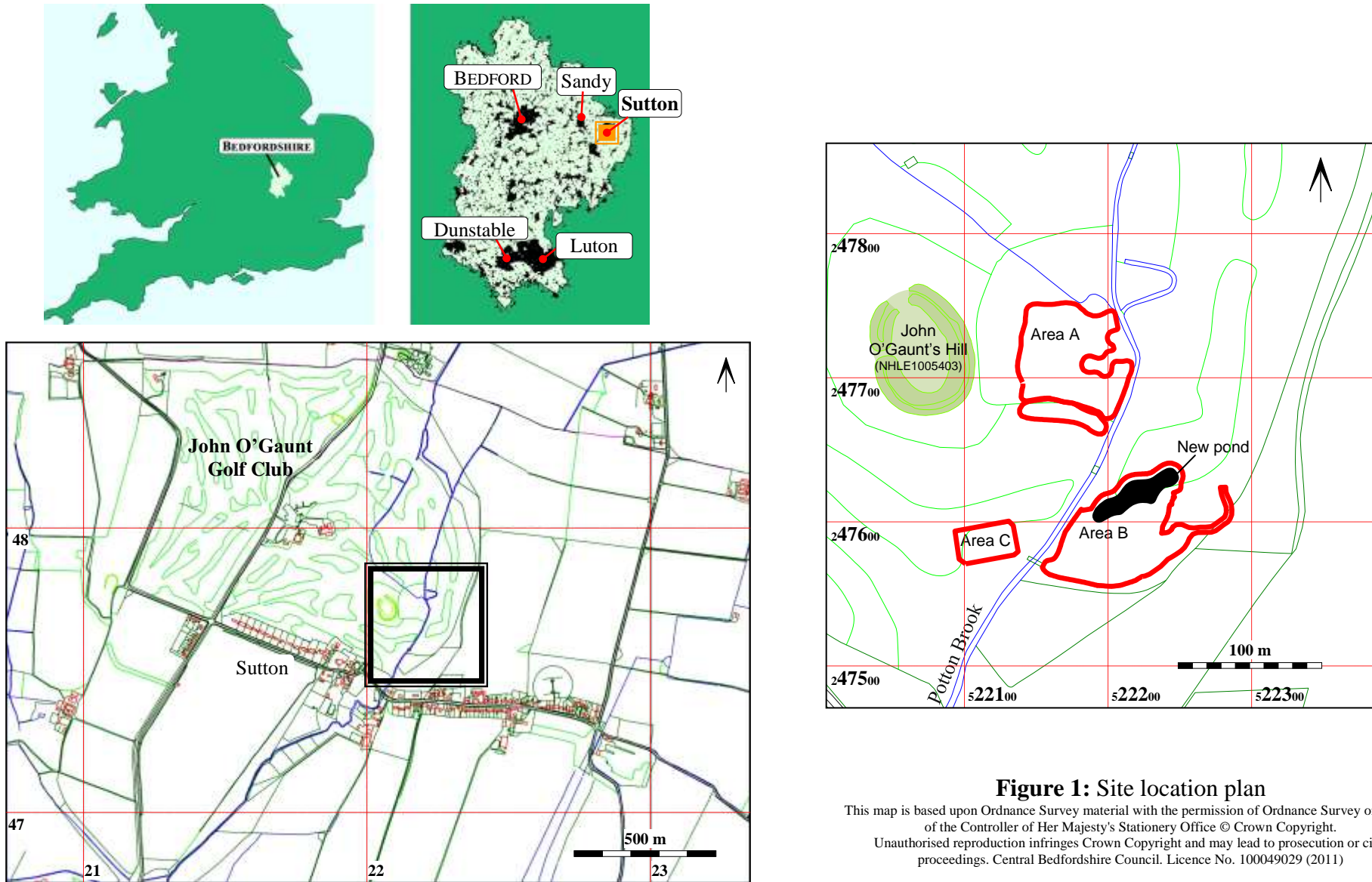
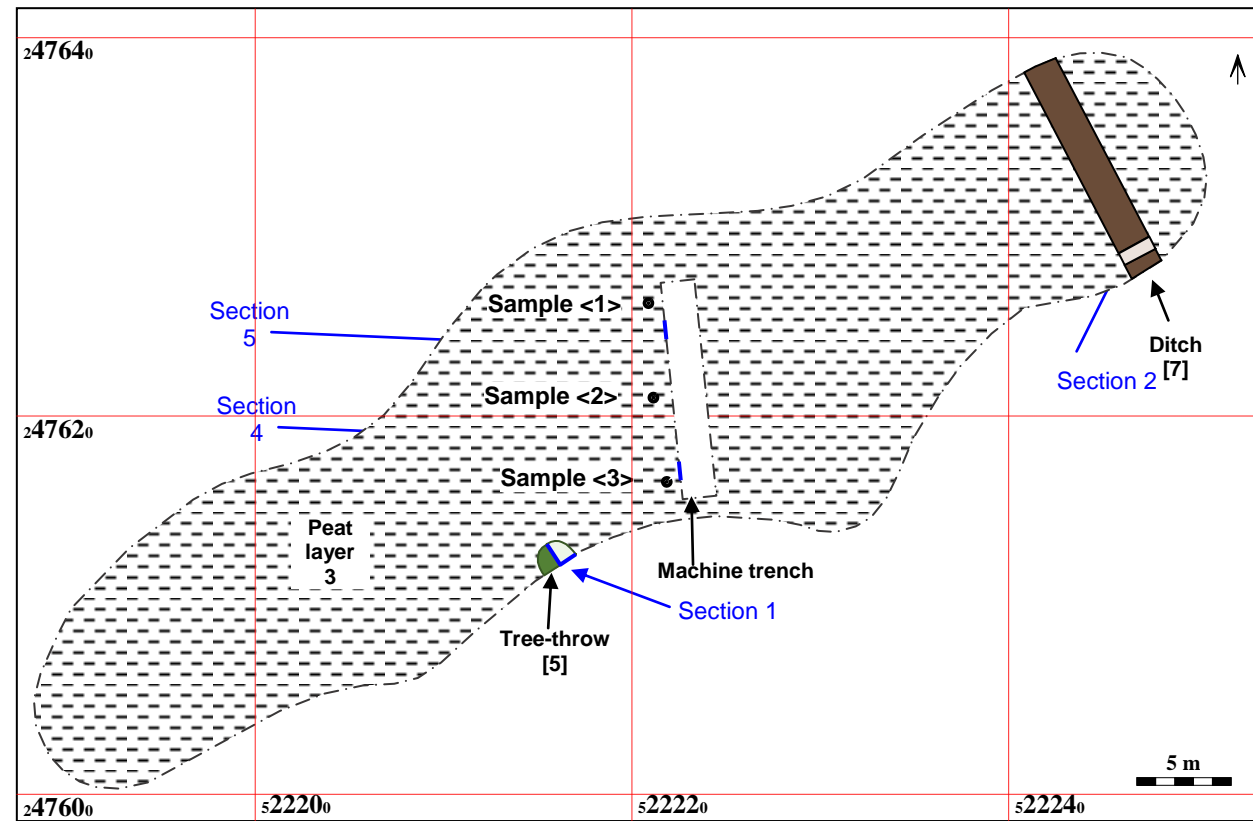
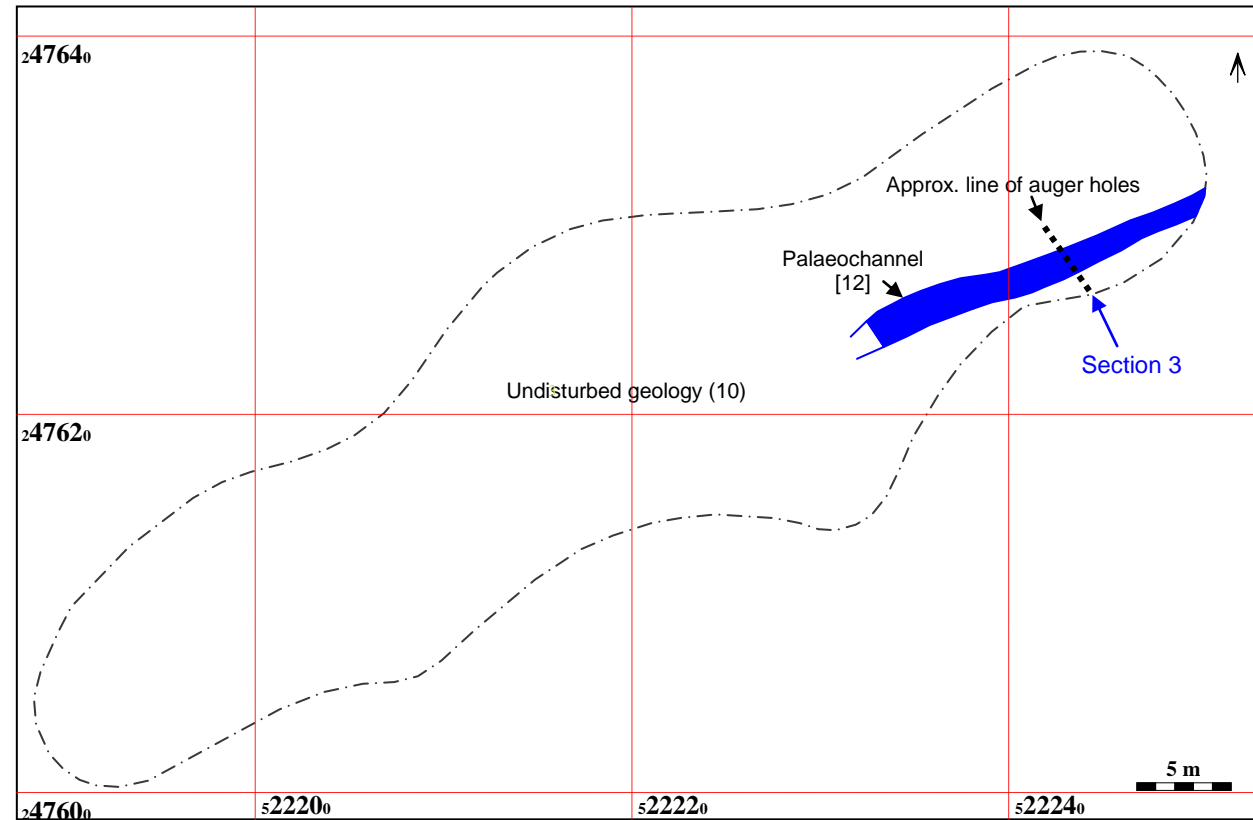


Figure 1: Site location plan

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Plan of the new pond after the removal of topsoil (1) and make-up layer (2)



Plan of the new pond after the removal of peat

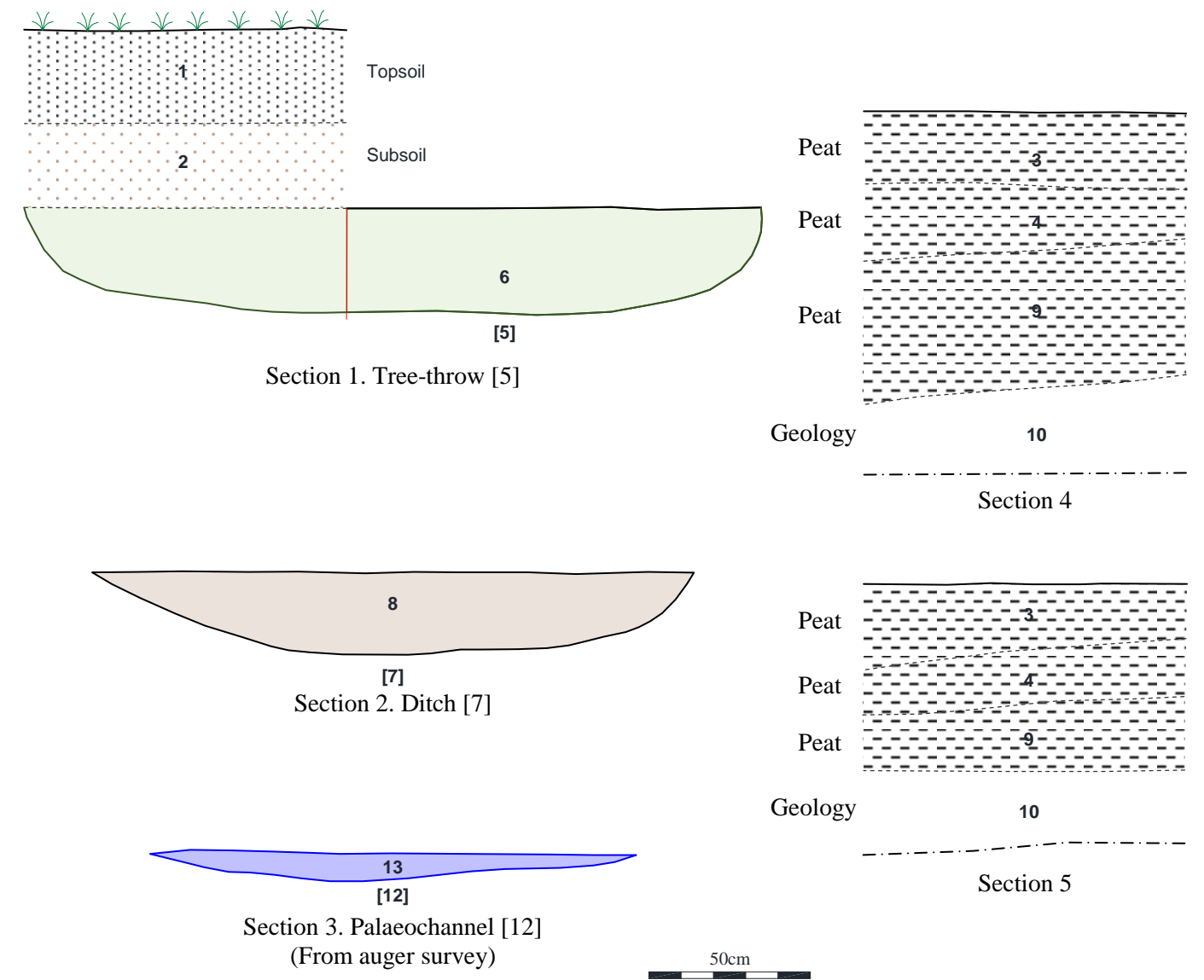


Figure 2: Area B all-features plan and sections



Figure 3: First edition OS map 1881–2
(Scale and location of the PDA are approximate)



Figure 4: Map of the Lordship of Sutton c. 1820
(Location of the PDA is approximate)

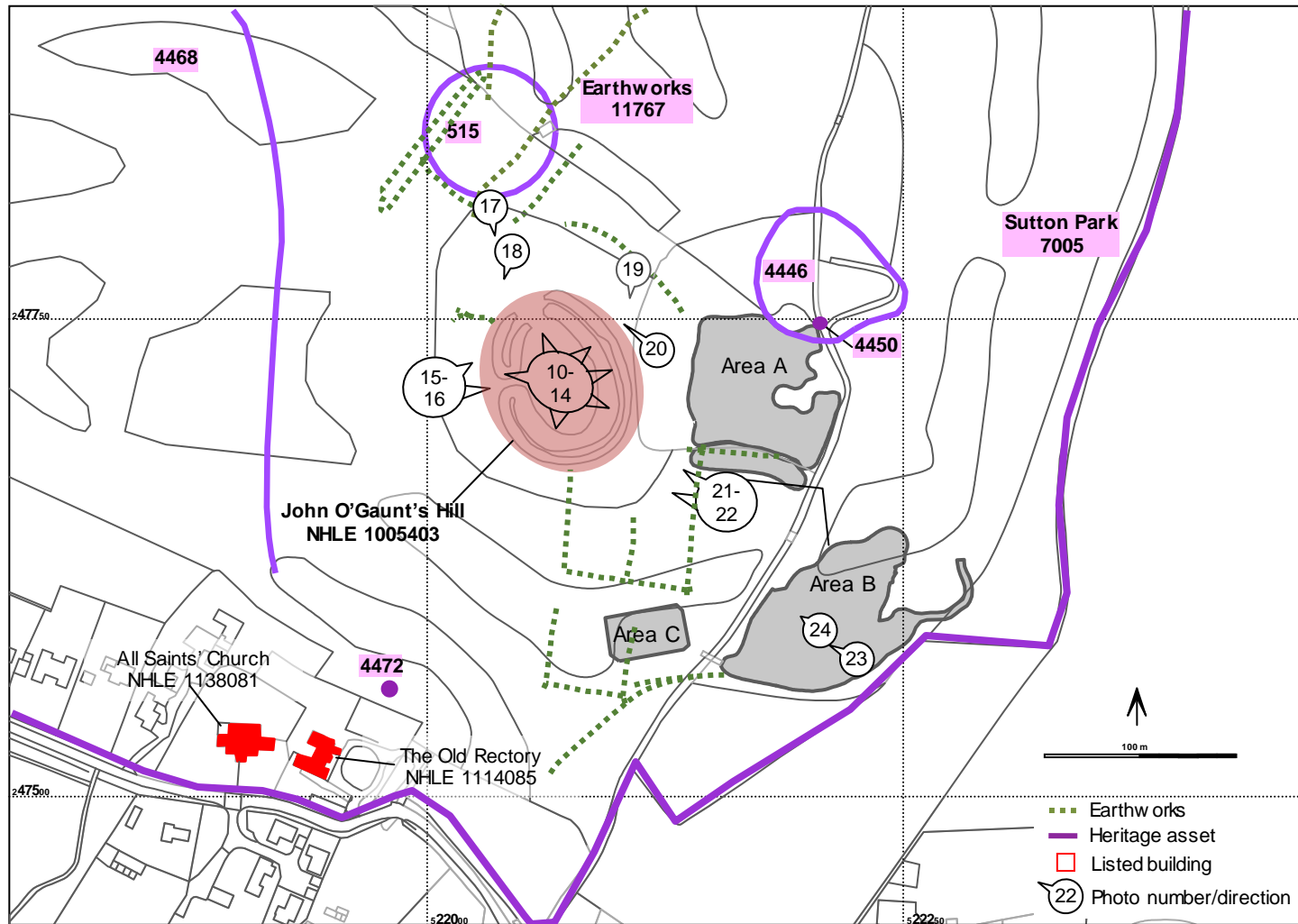


Figure 5: Plan showing heritage assets and location and direction of photographic viewpoints 10-24 (Plates 10-24)

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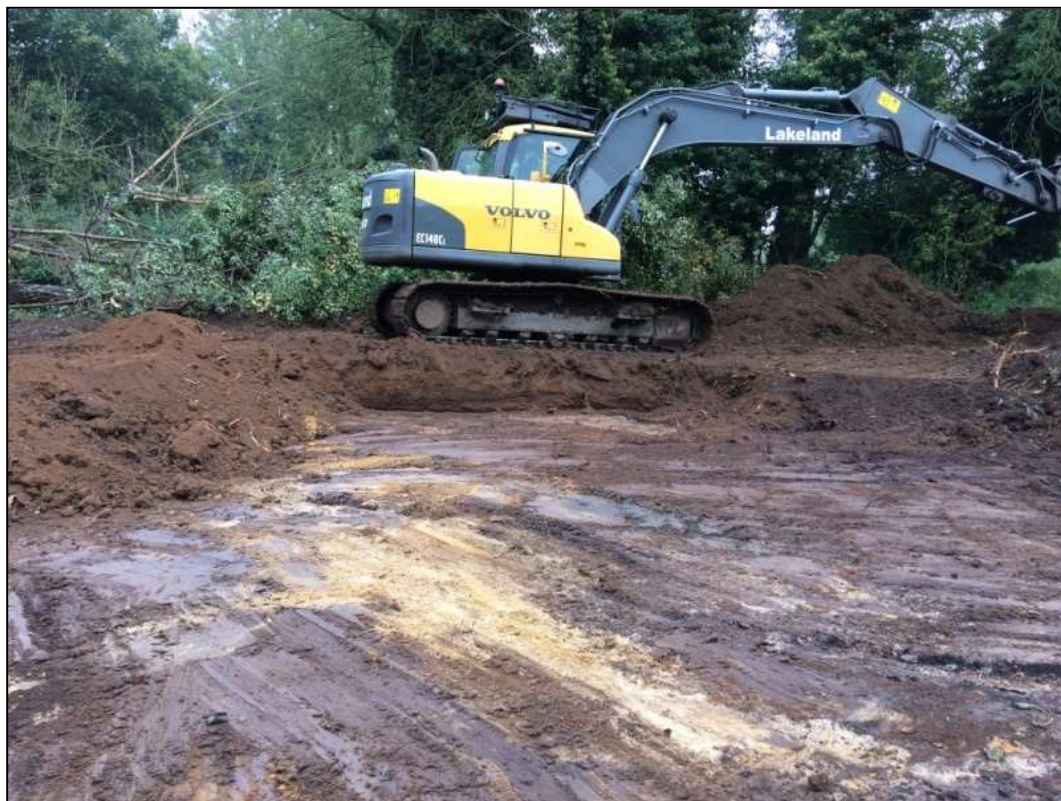


Plate 1: Removal of overburden and exposure of peat (17) in Area A, looking north



Plate 2: Area A after the removal of overburden, looking south-west



Plate 3:
Machine-dug trench through peat
(3, 4, 9 and 10) in Area B,
looking west



Plate 4: Representative section of machine-dug trench in Area B,
showing peat layers within the new pond footprint



Plate 5: Hand-dug segment of tree-throw [5],
looking south-west



Plate 6: Hand-dug segment of ditch [7],
looking north-east



Plate 7: View of the fully excavated new pond in Area B, looking south-west



Plate 8: Edge of the potential palaeochannel, looking north



Plate 9: Groundworks in Area C,
looking south



Plate 10: View from the central platform of John O’Gaunt’s Hill, looking north

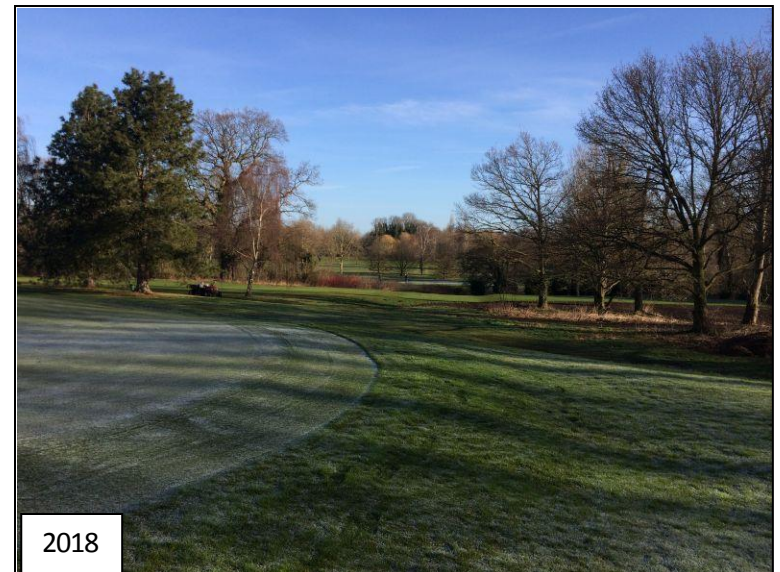


Plate 11: View from the central platform of John O’Gaunt’s Hill, looking north-east



Plate 12: View from the central platform of John O’Gaunt’s Hill, looking east



Plate 13: View from the central platform of John O’Gaunt’s Hill, looking south-east



Plate 14: View from the central platform of John O’Gaunt’s Hill, looking south-west and west



Plate 15: View of John O’Gaunt’s Hill from the south-west



Plate 16: View of John O'Gaunt's Hill from the south-west



Plate 17: View of John O'Gaunt's Hill from the north



Plate 18: View of John O'Gaunt's Hill from the north-east

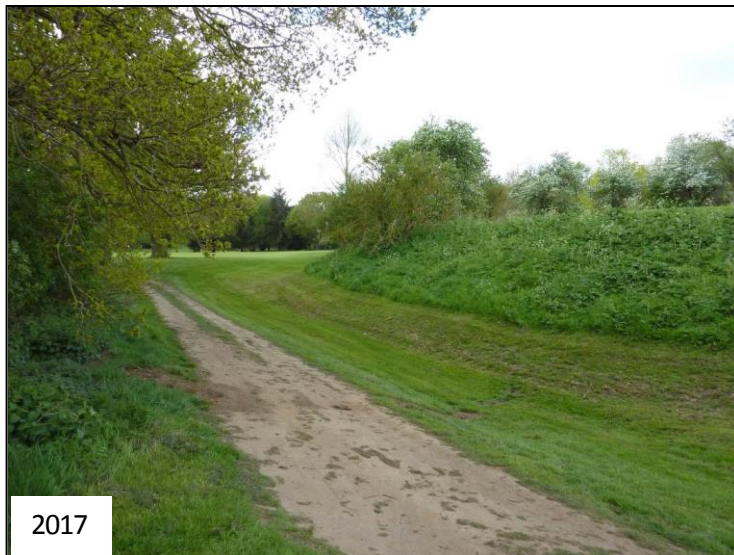


Plate 19: View of the eastern side of John O'Gaunt's Hill, from the north-west



Plate 20: View of the eastern side of John O'Gaunt's Hill, from the south-east



Plate 21: View of John O'Gaunt's Hill from the east



Plate 22: View of John O'Gaunt's Hill from the east



Plate 23: View of John O'Gaunt's Hill from Area B of the development

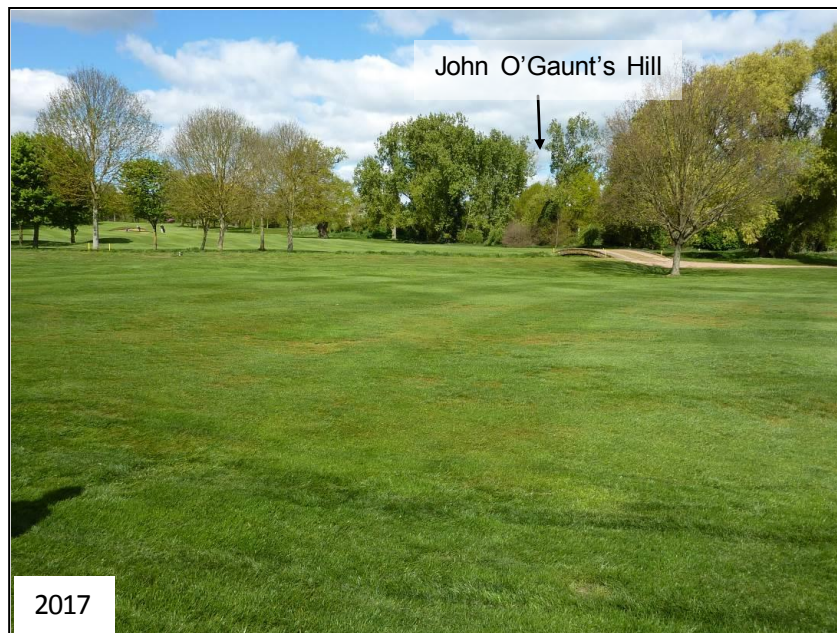


Plate 24: View of John O'Gaunt's Hill from Area B of the development

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