

# Photographic survey at the Ice House Booths Hill, Ramsey



## Photographic Survey



Nov 2015

**Client: Cambridgeshire County Council**

OA East Report No: 1865

OASIS No: oxford3-229532

NGR: TL292848

**The Ice House, Booth's Hill, Ramsey**

*Photographic Survey*

*By James Fairbairn*

*Editor: Aileen Connor BA AIFA*

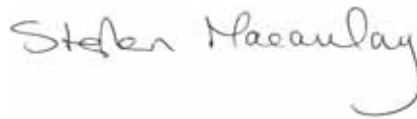
*Illustrator: Charlotte Walton MPhil*

*Report Date: November 2015*

**Report Number:** 1865  
**Site Name:** The Ice House, Booth's Hill, Ramsey  
**HER Event No:** 4609  
**Date of Works:** 13 October 2015  
**Client Name:** Cambridgeshire County Council  
**Client Ref:** The Ice House, Booth's Hill, Ramsey  
**Planning Ref:**  
**Grid Ref:** TL292848  
**Site Code:** RASBOH15  
**Finance Code:** RASBOH15  
**Receiving Body:** Cambridgeshire County Council  
**Accession No:** TBA

Prepared by: James Fairbairn  
Position: Project Officer  
Date: 24/11/15

Checked by: Stephen Macaulay  
Position: Senior Project Manager  
Date: 24/11/15  
Signed: .....



**Disclaimer**

*This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology being obtained. Oxford Archaeology accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.*

**Oxford Archaeology East,**  
15 Trafalgar Way,  
Bar Hill,  
Cambridge,  
CB23 8SQ

t: 01223 850500  
f: 01223 850599  
e: oaeast@thehumanjourney.net  
w: <http://thehumanjourney.net/oaeast>

© Oxford Archaeology East 2011  
Oxford Archaeological Unit Limited is a Registered Charity No: 285627

---

## Table of Contents

|   |           |
|---|-----------|
| <b>Summary.....</b>                       | <b>5</b>  |
| <b>1 Introduction.....</b>                | <b>6</b>  |
| 1.1 Scope of work.....                    | 6         |
| 1.2 Location.....                         | 6         |
| 1.3 Acknowledgements.....                 | 6         |
| <b>2 Aims and Methodology.....</b>        | <b>7</b>  |
| 2.1 Aims.....                             | 7         |
| 2.2 Site Conditions.....                  | 7         |
| 2.3 Methodology.....                      | 7         |
| 2.4 Project background.....               | 7         |
| <b>3 Historical Background.....</b>       | <b>9</b>  |
| <b>4 Ice Houses.....</b>                  | <b>10</b> |
| <b>5 Description.....</b>                 | <b>10</b> |
| 5.2 Conclusion.....                       | 11        |
| <b>6 Bibliography.....</b>                | <b>12</b> |
| <b>Appendix A. OASIS Report Form.....</b> | <b>13</b> |

### List of Figures

- Figure 1 Site location
- Figure 2 1891 Ordnance Survey map showing the ice house within the earthwork at Booths Hill and the position in relation to the Abbey and existing building.
- Figure 3 Elevation of entrance way, inner door void and southern wall.

### List of Plates

- Plate 1 View of the ice house from the south-east
- Plate 2 The Ice house seen from the north.
- Plate 3 The Ice house seen from the south-east.
- Plate 4 The entrance to the ice house seen before brick removal, viewed from the east
- Plate 5 Removal of soil from the entrance. Viewed from the east.
- Plate 6 The northern wall prior to soil removal. Viewed from the east.
- Plate 7 View of the inner ice house door. Viewed from the south-east.
- Plate 8 The southern wall of the ice house viewed from the east.
- Plate 9 The southern wall showing the mound, viewed from the east
- Plate 10 Inner doorway and surrounding brickwork, viewed from the east.
- Plate 11 Detail of the retaining wall at the entrance to the Ice house viewed from the north.
- Plate 12 Floor of the ice house entrance seen from above.
- Plate 13 Detail of brick arch above the inner entrance to the ice house, seen from the east.
- Plate 14 Detail of southern wall seen from the south
- Plate 15 The northern wall and position of the new doorway seen from the south-east.
- Plate 16 Pillars to outer entrance way, seen from the east.

## **Summary**

*On the 13th September 2015, Oxford Archaeology East conducted a photographic building survey and a watching brief on the entrance to a nineteenth century ice house located at Booths Hill Ramsey, Cambridgeshire, (TL292848). The project was commissioned by Cambridgeshire County Council and the survey was undertaken to record the entrance way in its current form before the installation of a new doorway by The Cambridgeshire Bat Group.*

## 1 INTRODUCTION

### 1.1 Scope of work

- 1.1.1 Oxford Archaeology East conducted a photographic survey on the entrance to a nineteenth century ice house located in an area known as Booth's Hill, Ramsey in Cambridgeshire (TL292848).
- 1.1.2 The work was undertaken in accordance with an Instruction issued by Quinton Carroll of the Cambridgeshire County Council Historic Environment Team.
- 1.1.3 The site archive is currently held by Oxford Archaeology East, and will be deposited with Cambridgeshire County Stores in due course

### 1.2 Location

- 1.2.1 The ice house is located within an earthwork on an area of land known as Booth's Hill, at Ramsey in Cambridgeshire. This earthwork lies within a probable Anarchy period (11th century) siege castle and is inside the outer precinct of the Benedictine Ramsey Abbey. The area is bounded by Hollow Lane to the to the south and west. The relatively modern Abbey Road lies directly to the east (Fig 2).

### 1.3 Acknowledgements

- 1.3.1 The author would like to thank Quinton Carroll of The Cambridgeshire Historic Environment Team for commissioning the work. Thanks also go to Trevor Ashton of C. E. Ashton & Sons for their help on site. Charlotte Walton produced the illustrations The author carried out the on site works and Stephen Macaulay managed the project.

## 2 AIMS AND METHODOLOGY

### 2.1 Aims

2.1.1 The work was designed to photographically record the existing ice house entrance in its existing state before the installation of a new doorway. The specific aims of the project were:

- To produce a series of photographs and scaled drawings documenting the current entrance way before alteration work began.
- To monitor the removal of soil from within the entrance way to a point at which the new door could be installed.
- To locate the photographs to a plan showing position and the direction each photograph was taken
- To produce a high quality, fully integrated archive suitable for long term deposition
- To provide for the dissemination and publication of the project results as appropriate.

### 2.2 Site Conditions

2.2.1 The entrance to the ice house was accessible after Iron grids installed for security had been removed. The area surrounding the ice house was overgrown and vegetation hampered the photographic process but generally the conditions were conducive to carrying out the photographic survey.

### 2.3 Methodology

2.3.1 The photographic survey (equivalent to Historic England Level 1) supplemented by scaled drawings was carried out by the author using a high-resolution Nikon D90 digital SLR camera and a 35mm SLR camera. Due to the small and cramped nature of the entrance way some of the photographs were taken at an oblique angle and scaled drawings were used to supplement the photographic record.

### 2.4 Project background

2.4.1 The site of the ice house was part of the land leased from Lord De Ramsey by Cambridgeshire County Council. When Abbey College was created the lease remained with the council. It was then managed by staff and pupils for which the school won national awards (Macaulay, S. pers comm). In the late nineteen eighties the site was taken over by Cambridgeshire County Council and became the subject of a Monument Management Agreement run jointly between English Heritage (now Historic England) and Cambridgeshire County Council. Most of the work carried out at the site has been the removal of scrub and vegetation from around and within the moat.

2.4.2 The most recent episode of work at the site included the removal of brick rubble and rubbish from within the ice house chamber. This work was carried out by volunteers of the Cambridgeshire Bat Group.





### 3 HISTORICAL BACKGROUND

- 3.1.1 The site is on the south side of the outer precinct of the Benedictine Ramsey Abbey (SM141). A detailed historical background of the Abbey can be found in OA east report 1386 (Spoerry et al 2008, Gilmour. 2012). The historical background found here focusses on the monument of Booths Hill and the associated ice house. The account below is an abridged version of the Cambridgeshires HER listing and description of the site.
- 3.1.2 The ice house is set within the scheduled monument (No.1004643) of Booths Hill that is listed by Cambridgeshire HER (CHER 01777). The description is as follows:
- On the South side of the enclosure (of Ramsey Abbey) is an earthwork of doubtful purpose, known as Booth's Hill. It consists of an 'island' of irregular oval shape, with a mound about 12ft high near the middle of it. This mound has been altered for the building of an ice house.
- 3.1.3 Within the moat surrounding Ramsey Abbey, and near its southern side, is a mound surrounded by a moat. The mound, which goes by the name of Booths Hill, is not large, but it has been adapted as an ice house. So its present form cannot be guaranteed as original; it now rises some 16ft above the bottom of the moat, which is itself 4ft below the surrounding surface. It stands about the middle of the S side of the enclosure, which is 310ft long by about 120ft wide. Within the enclosure, eastwards of the mound, is a large pond, and there are also three other depressions, but some of these may be modern. It is possible that a little castle was erected by Geoffrey de Mandeville for his own use when he took possession of the Abbey and quartered his soldiers there. He was killed in 1144, and his son removed the soldiers to Wood Walton.
- 3.1.4 An ice house of unknown date but likely to be of 19th century date is located within a 12th century motte and has undergone restoration work.
- 3.1.5 A small motte within a moat probably built by Geoffrey de Mandeville for his own use when he took possession of the Abbey and quartered his soldiers there, c 1140-1144. The mound has been adapted as an ice house in recent years, so its present form cannot be guaranteed as original but the moats are genuine and the whole earthwork is interesting, particularly as it can be dated. Lying south of Ramsey Abbey, this small motte is heavily overgrown. so dimensions difficult to assess. The moat is approximately 5m at widest part, wet in some areas, but filled with dead wood and some rubbish. It encloses a mound approximately 3m-4m high from ditch bottom, covered in ivy, brambles and scrub, supporting some mature sycamore. There is a depression in centre. Entrance appears to be NW
- 3.1.6 The west part of site is now occupied by 29 Hollow Lane, The site has now been cleared of scrub and undergrowth and the ice house fitted with a door (Key with AFT, CCC Archaeology.) (No door or key remained when the photographic survey was undertaken).
- 3.1.7 The "Hill" is constructed of spoil from adjacent fish ponds and the surface area at the summit is only large enough to hold a small building. The size, construction and topographical situation is not in keeping with a motte and bailey. These earthworks are probably the remains of a C17 / C18 gazebo mound and fish ponds contemporary with the adjacent mansion.

## 4 ICE HOUSES

- 4.1.1 Ice houses were buildings that were commonly used on large estates prior to the invention of the refrigerator to store ice to preserve food throughout the year. Their construction varied, some being underground chambers but many were buildings with various types of insulation, often located close to natural sources of winter ice such as freshwater lakes. The example at Booths Hill may have sourced its ice from local fish ponds, local rivers or from the moat itself although it is also not unknown for owners to have icebergs shipped from the coast which were then broken up and placed in the ice house.
- 4.1.2 During the winter, ice and snow would be taken into the ice house and packed with insulation, often straw or sawdust. It would remain frozen for many months, often until the following winter, and could be used as a source of ice during summer months. The main application of the ice was the storage of perishable foods, but it could also be used simply to cool drinks, or allow ice-cream and sorbet desserts to be prepared.

## 5 DESCRIPTION

- 5.1.1 The structure at Booths Hill thought to have been built around 1832 closely resembles a Cup and Dome Ice House, that is the lower section below the opening being the cup and the roof the dome. This was the most popular type of construction, but was also the most expensive. However the advantages of this type of construction were considerable, not the least being the strength of the structure. Ease of loading was an important consideration, and the doorway or hatch into the chamber was sited on the east side dome, the threshold being at a height to allow ice to be tipped into the chamber. The opening to the main chamber at the Booths Hill Ice house is at waist height.

### ***Entrance passage*** (Fig 3)

- 5.1.2 The photographic survey at the Booths Hill Ice House concentrated on the entrance way to the chamber. The passage way had a length of 4.2m a width of 1.10m and a height of 2.2m. Although now open there would have once been a roof over the entrance corridor that would have been covered by the mound for extra insulation.
- 5.1.3 The entrance way was constructed of red brick laid in an English bond. (Plate 8). The bricks measured 225mm x 100mm and had a thickness of 60mm. These were handmade locally and date to the 19th century. The outer walls of the entrance to the ice house are at least two courses thick. At the entrance, the wall has a thickness of 0.6m. These “piers” add strengthening to the wall. Both to the east and west of the doorway a wall has been added to provide extra strength (Plate 11) at the time of the survey the wall was covered with vegetation so it was not possible to ascertain whether this was part of the original structure or a later addition. Although no evidence of a door was seen, undoubtedly there would have been one present when the ice house was in use.
- 5.1.4 The walls to the entrance have undergone various alterations and are in a poor state of repair. A central pier with a recess (Plate 14) would have once been the location of a door. This recess is constructed of brick and stands proud of the main walls to roof height it has a recess width of 0.15m. This recess would have possibly held a wooden frame for an inner door. This is also where the new door will be located.
- 5.1.5 The floor of the passage way was covered in soil and vegetation (Plate 4) at the time of the survey. Some of the debris including bricks stacked against the southern wall were

removed (Plate 5) to allow the new door to be installed. No sign of the original floor surface was seen.

### ***Opening to the inner chamber*** (Fig 3)

- 5.1.6 Access to the main chamber was located at the end of the passageway and consisted of a small opening measuring 0.72m x 0.60m (Plate 7). This was located at approximately 1.10m above ground level. This opening was also in a poor state of repair with most of the bricks located to the sides missing (Plate 10).
- 5.1.7 This opening was vaulted structure recessed 0.60m into the main wall of the ice house. This may give an indication to the thickness of the walls of the main structure, although the chamber is likely to be double skinned with a small cavity between the two courses of brick to aid insulation.

## **5.2 Conclusion**

- 5.2.1 The Ice house at Booths Hill is a good example of a nineteenth century structure that would have been typical of many that were spread across the county of Cambridgeshire. Although many have disappeared or have fallen into neglect it is now recognised that this type of building has an importance. The work done at Booths Hill both by the management scheme and by the Cambridgeshire Bat Group has helped to highlight this and has shown that these building are not only historically important but have a part to play in preserving wildlife habitats.

## 6 BIBLIOGRAPHY

- |  |      |   |
|--|------|---|
| English Heritage   | 2006 | Understanding Historic Buildings – A Guide to Good Recording Practice   |
| Gilmour, N   | 2012 | Ramsey Abbey, Cambridgeshire. <i>Geophysical Survey and Archaeological Test Pit Excavation</i>                        |
| Spoerry, P,<br>Atkins, R,<br>Macaulay, S and<br>Popescu, E | 2008 | Ramsey Abbey, Cambridgeshire: <i>Excavations at The Site of a Fenland Monastery: Medieval Archaeology</i> , 52, 2008. |

## APPENDIX A. OASIS REPORT FORM

All fields are required unless they are not applicable.

### Project Details

|                            |   |             |         |            |
|----------------------------|---|-------------|---------|------------|
| OASIS Number               | oxford3-229532  |             |         |            |
| Project Name               | Photographic survey at the Ice House, Booths Hill, Ramsey |             |         |            |
| Project Dates (fieldwork)  | Start   | 13-10-2015  | Finish  | 13-10-2015 |
| Previous Work (by OA East) | No  | Future Work | Unknown |            |

### Project Reference Codes

|           |          |                       |  |
|-----------|----------|-----------------------|--|
| Site Code | RASBOH15 | Planning App. No.     |  |
| HER No.   | 4609     | Related HER/OASIS No. |  |

### Type of Project/Techniques Used

Prompt

#### Please select all techniques used:

|   |   |
|---|---|
| <input type="checkbox"/> Annotated Sketch           | <input type="checkbox"/> Photogrammetric Survey               |
| <input type="checkbox"/> Dendrochronological Survey | <input checked="" type="checkbox"/> Photographic Survey       |
| <input type="checkbox"/> Laser Scanning             | <input type="checkbox"/> Rectified Photography                |
| <input type="checkbox"/> Measured Survey            | <input type="checkbox"/> Survey/Recording Of Fabric/Structure |

### Monument Types/Significant Finds & Their Periods

List feature types using the [NMR Monument Type Thesaurus](#) and significant finds using the [MDA Object type Thesaurus](#) together with their respective periods. If no features/finds were found, please state "none".

| Monument  | Period                     | Object | Period           |
|-----------|----------------------------|--------|------------------|
| Ice house | Post Medieval 1540 to 1901 |        | Select period... |
|           | None                       |        | Select period... |
|           | Select period...           |        | Select period... |

### Project Location

|            |                 |   |          |
|------------|-----------------|---|----------|
| County     | Cambridgeshire  | Site Address (including postcode if possible) |          |
| District   | Huntingdonshire | Booths Hill<br>Ramsey<br>Cambridgeshire       |          |
| Parish     | Ramsey          |   |          |
| HER        | Cambridge       |   |          |
| Study Area |                 | National Grid Reference                       | TL292848 |

## Project Originators

|                           |                               |
|---------------------------|-------------------------------|
| Organisation              | OA EAST                       |
| Project Brief Originator  | Cambridgeshire County Council |
| Project Design Originator | OA East                       |
| Project Manager           | Stephen Macaulay              |
| Supervisor                | James Fairbairn               |

## Project Archives

| Physical Archive | Digital Archive | Paper Archive   |
|------------------|-----------------|-----------------|
|                  | OA East Offices | OA East Offices |
|                  | RASBOH15        | RASBOH15        |

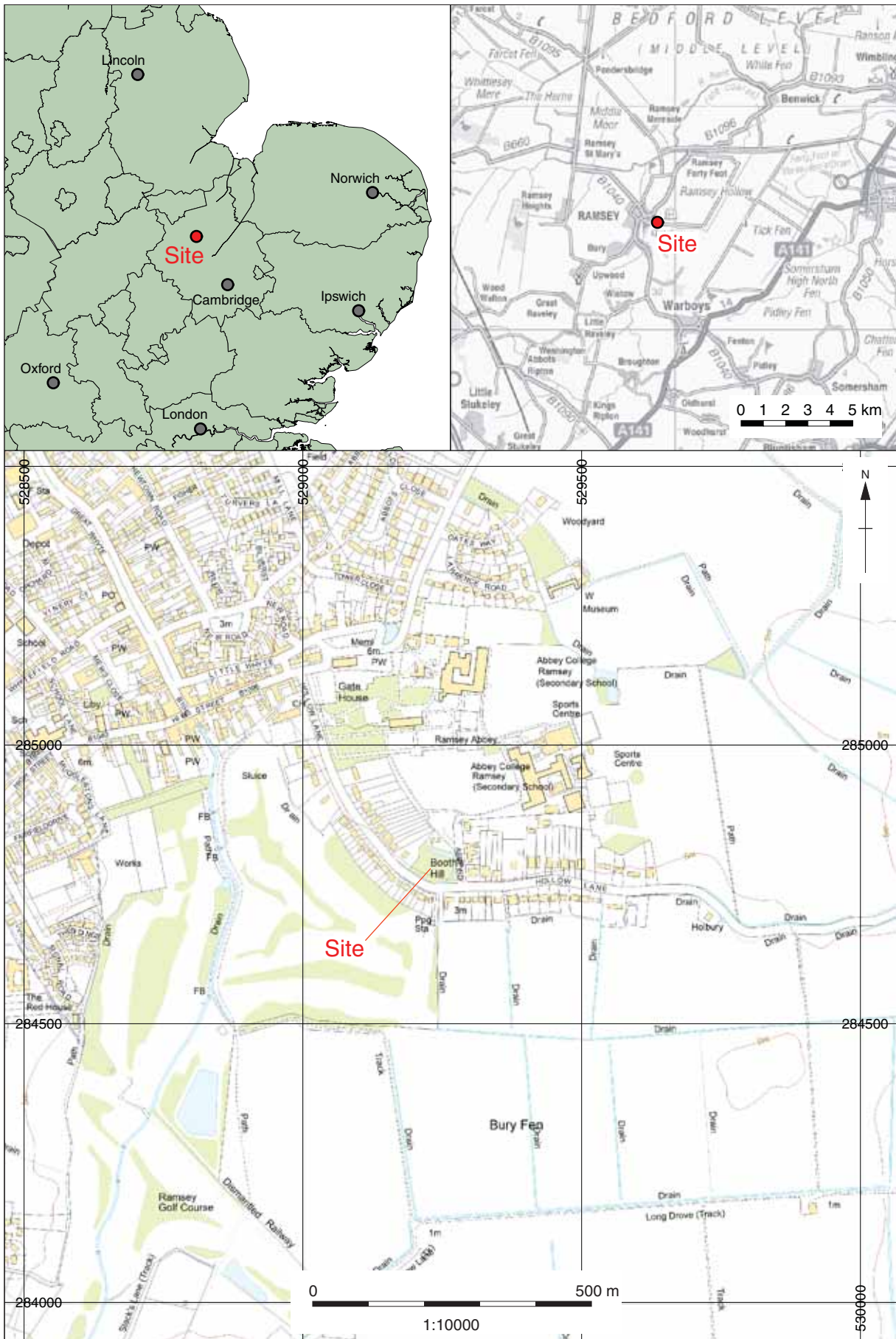
## Archive Contents/Media

|                     | Physical Contents                   | Digital Contents                    | Paper Contents                      |
|---------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Animal Bones        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Ceramics            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Environmental       | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Glass               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Human Bones         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Industrial          | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Leather             | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Metal               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Stratigraphic       |                                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Survey              |                                     | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Textiles            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Wood                | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Worked Bone         | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| Worked Stone/Lithic | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |
| None                | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other               | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            |

| Digital Media                                     | Paper Media                                  |
|---|--|
| <input type="checkbox"/> Database                 | <input type="checkbox"/> Aerial Photos       |
| <input type="checkbox"/> GIS                      | <input type="checkbox"/> Context Sheet       |
| <input type="checkbox"/> Geophysics               | <input type="checkbox"/> Correspondence      |
| <input checked="" type="checkbox"/> Images        | <input type="checkbox"/> Diary               |
| <input checked="" type="checkbox"/> Illustrations | <input checked="" type="checkbox"/> Drawing  |
| <input type="checkbox"/> Moving Image             | <input type="checkbox"/> Manuscript          |
| <input type="checkbox"/> Spreadsheets             | <input checked="" type="checkbox"/> Map      |
| <input type="checkbox"/> Survey                   | <input type="checkbox"/> Matrices            |
| <input checked="" type="checkbox"/> Text          | <input type="checkbox"/> Microfilm           |
| <input type="checkbox"/> Virtual Reality          | <input type="checkbox"/> Misc.               |
|   | <input type="checkbox"/> Research/Notes      |
|   | <input checked="" type="checkbox"/> Photos   |
|   | <input type="checkbox"/> Plans               |
|   | <input checked="" type="checkbox"/> Report   |
|   | <input checked="" type="checkbox"/> Sections |
|   | <input type="checkbox"/> Survey              |

### Notes:





Contains Ordnance Survey data © Crown copyright and database right 2015. All rights reserved. Centremaps 10001998

Figure 1: Site location



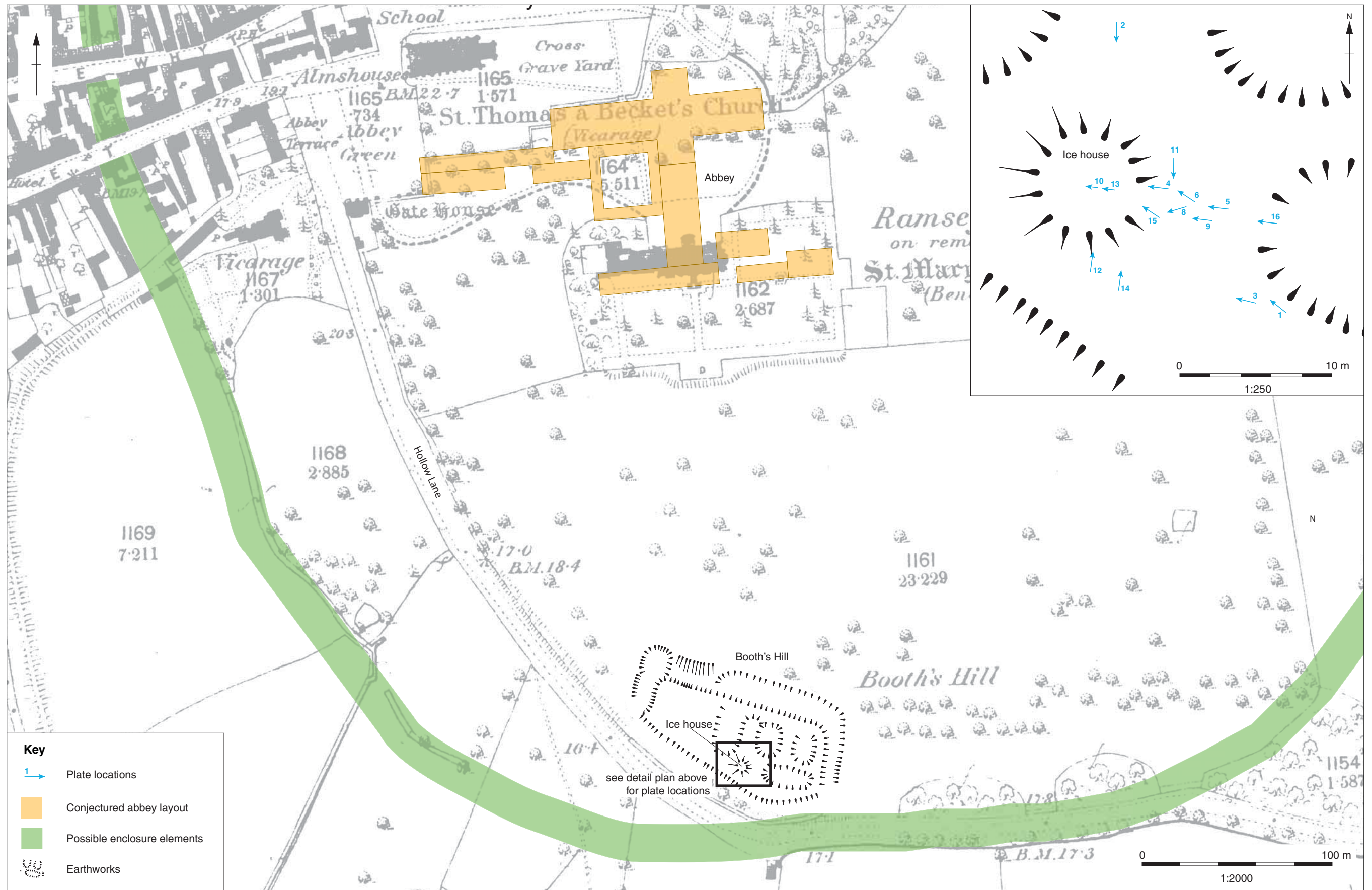


Figure 2: 1891 Ordnance Survey map showing the ice house within the earthwork at Booth's Hill and the position in relation to the Abbey and existing building.

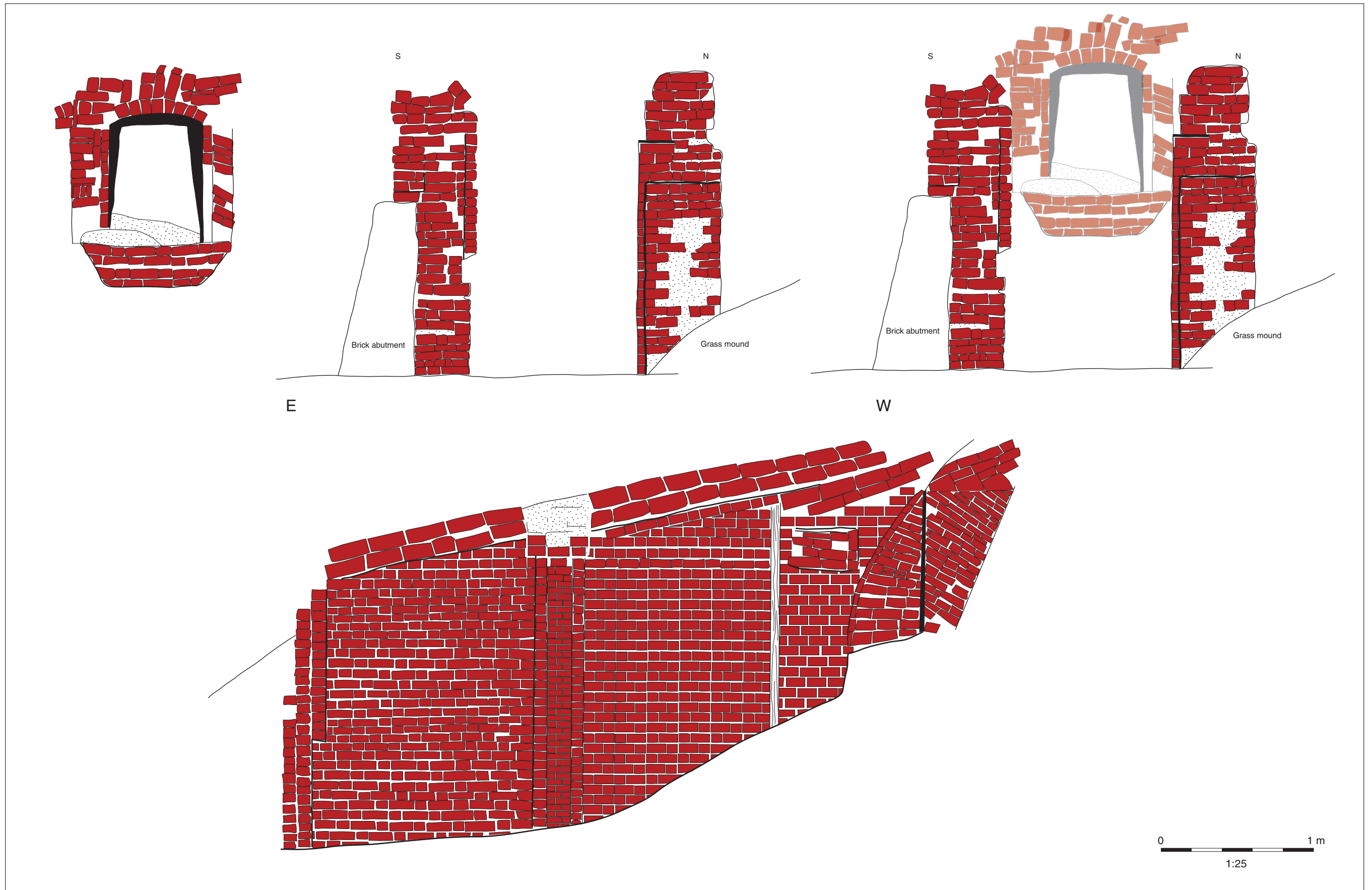


Figure 3: Elevation of entrance way, inner door void and southern wall.





Plate 1: View of the ice house, from the south-east



Plate 2: The Ice house, seen from the north





Plate 3: The Ice house, seen from the south-east



Plate 4: The entrance to the ice house seen before brick removal, viewed from the east





Plate 5: Removal of soil from the entrance, viewed from the east.



Plate 6: The northern wall prior to soil removal, viewed from the east.





Plate 7: View of the inner ice house door, viewed from the south-east



Plate 9: The southern wall showing the mound, viewed from the east



Plate 8: The southern wall of the ice house, viewed from the east



Plate 10: Inner doorway and surrounding brickwork, viewed from the east.





Plate 11: Detail of the retaining wall at the entrance to the Ice house, viewed from the north.



Plate 12: Floor of the ice house entrance, seen from above.





Plate 13: Detail of brick arch above the inner entrance to the ice house, seen from the east.



Plate 14: Detail of northern wall, seen from the south





Plate 15: The northern wall and position of the new doorway, seen from the south-east.



Plate 16: Pillars to outer entrance way, seen from the east.



### **Head Office/Registered Office/ OA South**

Janus House  
Osney Mead  
Oxford OX2 0ES

t: +44 (0) 1865 263 800  
f: +44 (0) 1865 793 496  
e: [info@oxfordarchaeology.com](mailto:info@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

### **OA North**

Mill 3  
Moor Lane  
Lancaster LA1 1QD

t: +44 (0) 1524 541 000  
f: +44 (0) 1524 848 606  
e: [oanorth@oxfordarchaeology.com](mailto: oanorth@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>

### **OA East**

15 Trafalgar Way  
Bar Hill  
Cambridgeshire  
CB23 8SQ

t: +44 (0) 1223 850500  
e: [oaeast@oxfordarchaeology.com](mailto: oaeast@oxfordarchaeology.com)  
w: <http://oxfordarchaeology.com>



**Director:** Gill Hey, BA PhD FSA MCIFA  
*Oxford Archaeology Ltd is a  
Private Limited Company, N<sup>o</sup>: 1618597  
and a Registered Charity, N<sup>o</sup>: 285627*