

**RESULTS OF A GEOPHYSICAL SURVEY AT
SHINGAY HOSPITALLER COMMANDERY,
CAMBRIDGEHIRE**

NGR REF: TL 3104 4734



DECEMBER 2013 TO MAY 2014

Report prepared by CHRISTER CARLSSON, PhD

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Background

Between 1 December 2013 and 31 May 2014 a geophysical survey was carried out at the former Hospitaller Commandery in Shingay cum Wendy in Cambridgeshire. Being a Scheduled Monument a Section 42-Licence was obtained from English Heritage in November 2013, prior to any fieldwork on the site (Licence No: SL00067911). This report deals with the results of the investigation. The survey had a strictly scientific purpose, as the site has never been the subject of any archaeological investigations before.

Site Location, Geography and Geology

The remains of the commandery are situated just outside the small village of Shingay cum Wendy. It is today a very quiet and rural place, but over 500 years ago Shingay was well known for its powerful Hospitaller commandery. The site is located some 15 miles southwest of Cambridge and is today a Scheduled Monument (1006852; CB 108) (National Grid Ref: TL 3104 4734). The investigation area is ca 50 000m² with an altitude of ca. 25m AOD. The geology consists of sandy- and silty soils over gault formations and undifferentiated mudstones (Fig. 1-2).

To the north of the site is the river Cam, which leads up to the university town of Cambridge in the north east. About 5 miles east of the site is the old Roman road “Ermine way”, with many known Roman settlements. The landscape around river Cam is otherwise well provided with Iron Age, Roman, Saxon and Norman settlements. The closest town is Royston, in the Medieval period well known for its Augustinian Priory.

The remains from the Hospitaller commandery are situated in a field with well-preserved medieval earthworks. The field has never been disturbed by any modern farming activities, but has nevertheless been used as pasture grounds in modern times. The site is therefore easy to access and contains only low vegetation. Surrounding the site is a wide and deep moat. Recently this moat was re-excavated, generally along its old course, and is now refilled with water. An old, possibly medieval, mill race forms the northern boundary of the site.



Fig. 1. Shingay Hospitaller commandery is situated some 15 miles southwest of Cambridge in the small village of Shingay cum Wendy in Cambridgeshire.

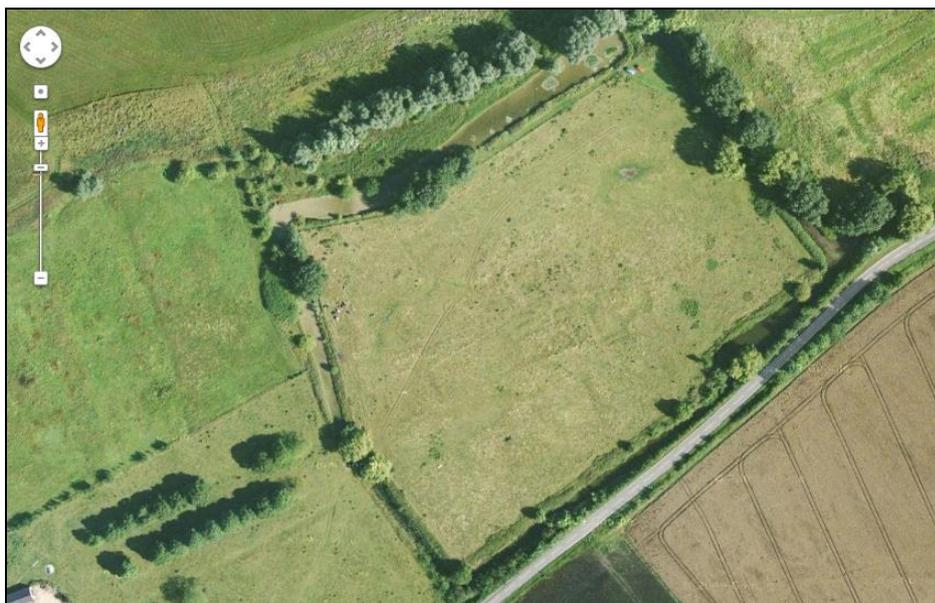


Fig. 2. A modern aerial photo of the site clearly shows the preserved earthworks within the moated enclosure.

Purpose of the Investigation

The main purpose of the geophysical survey was to find evidence for the layout of the medieval commandery: What is preserved beneath the ground, and what was the size and layout of the complex? Experiences from similar sites have shown that the bulk of buildings in a medieval commandery were various economy buildings, rather than the more centrally located living quarters and religious structures.

There would typically be barns, stables, kitchens, mills, fishponds, dovecotes, brewing houses and other economy buildings in close vicinity to the chapel and the hall. An idea of what may lay hidden beneath the ground in Shingay is given by a number of similar, fully excavated, sites in the UK. The best example would probably be South Witham Templar Preceptory in Lincolnshire. Even if this site belonged to the Templars, rather than the Hospitallers, it can still give us a good idea of what a medieval site belonging to a Military Order would be expected to contain (Fig. 3).

Below is a reconstruction of South Witham based on the results of the fully excavated site. It clearly shows that the most important buildings, such as the hall and the chapel, were situated at the centre of the site, while a whole range of various economy buildings were found closer to the edges. Northern European Military Order sites could have many different layouts, but the same kinds of components were often present.

What is important to remember is that the main purpose of the properties belonging to the Military Orders in Western Europe was to manage large areas of surrounding farming land in order to raise funds for the Crusading movement. It is therefore the economy buildings, rather than the main buildings, that must be identified in order to fully understand such sites. Even if the main buildings were made of stones, there were typically also a number of simpler buildings present (such as wattle-and-daub-, timber- or timber-framed structures).

By identifying the position and level of preservation of various buildings at Shingay it was hoped that a much better understanding of the medieval site would be obtained. The site could then be compared to similar sites in the UK, as well as other European countries.

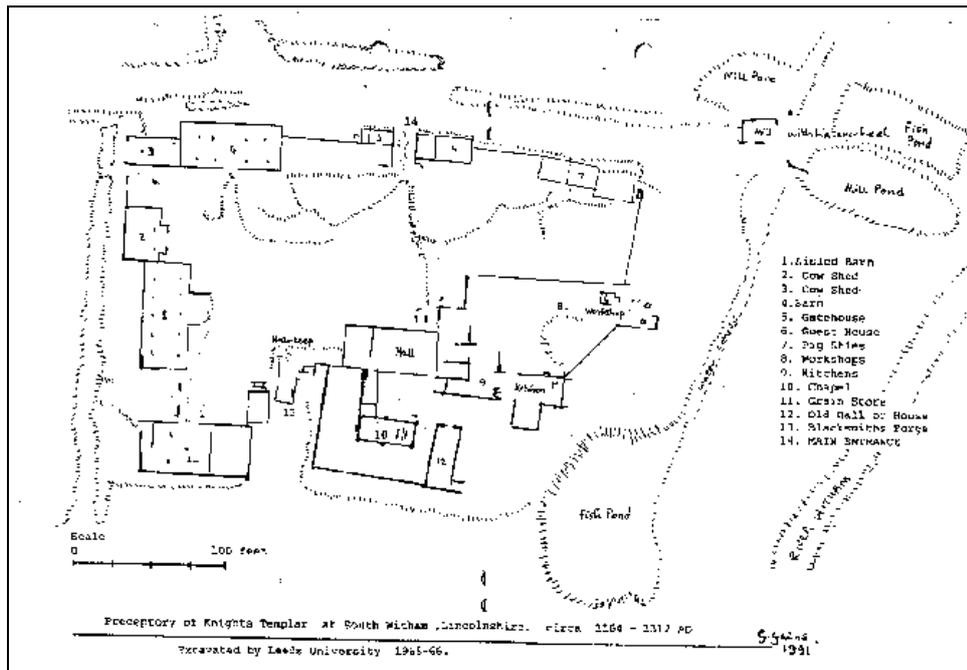


Fig. 3. The fully excavated Templar Preceptory at South Witham in Lincolnshire clearly shows that more than twenty different buildings were present within this medieval site.

Staff, Equipment and Time Schedule

The survey was led by Dr Christer Carlsson, an archaeologist with more than 15 years of experience from archaeological investigations. Dr Carlsson is presently based in the UK, where he is combining commercial fieldwork with his own research. Dr Carlsson received his PhD from the University of Southern Denmark in 2010, with a thesis focusing on the Hospitaller Commanderies in Medieval Scandinavia 1291-1536.

Most of the fieldwork at Shingay was carried out by members of the “Archaeology RheeSearch Group”, an amateur archaeological group based in Cambridgeshire. The instruments used in the investigation, a Bartington 601 Gradiometer and a TR/CIA resistance meter, are owned by this society and were both provided and operated by them. The group has much experience from conducting various geophysical investigations in Cambridgeshire, and members of the society were present during the entire investigation. The group has tested the equipment on a number of Medieval and Prehistoric sites in the county with very good result. Most of the fieldwork was carried out over the weekends between December 2013 and May 2014, with a break over the winter period when the site was partly flooded (Fig. 4-5).



Fig. 4. Photo of the site towards northeast. The earthworks are clearly visible in the central part of the picture. This is where one would expect to find remains of the most central part of the complex.



Fig. 5. Photo of the site towards northwest. The earthworks are clearly visible in the central part of the picture. This is where one would expect to find remains of the most central part of the complex.

The History of Shingay Hospitaller Commandery

Shingay Hospitaller commandery was one of ca 70 houses known to have belonged to this religious order in medieval England. Even if the Hospitallers were mainly associated with the Crusades in the Holy Land they were also skilled businessmen and administrators. Being able to administer the properties that had been granted to them was necessary for the financing of the armies in the Mediterranean. The Hospitaller's network of land and estates was extensive, and the English commanderies filled the function of centres for administration and agriculture rather than being heavily fortified defence units. For this reason the UK commanderies did not look very different from other wealthy manors in medieval Britain.

A medieval Hospitaller commandery would typically also have a number of ponds or streams for fishing, as well as mill races. Such waters worked as natural boundaries in the landscape, as they helped defining the areas occupied by the religious communities. The commandery in Shingay is for instance still surrounded by its well preserved moat (Fig. 6-7). For the interpretation of the site at Shingay we can therefore partly rely on information from other Hospitaller (and Templar) sites, which have been fully excavated in the UK and other countries.

As one of the earliest Hospitaller commanderies in England the complex at Shingay cum Wendy was founded by Walter, the first prior in England, who held this office from 1144 to 1162. The commandery was established on land given by Sybil de Rames and the Earl of Gloucester. A cell of the Sisters of the Order was established here at about the same time, but these sisters were transferred to Minchin Buckland in Somerset in 1185.

From very early days, the commandery carried out a thorough policy of enclosure, which reduced the village of Shingay to a mere handful of houses; the old village had been largely cleared by 1452. Throughout the Middle Ages the parish was dominated by the Knights Hospitallers, who held most of the land there. Lying 3 km from the Old North Road the complex played host to royalty on several occasions. In the Peasant's Revolt of 1381 the commandery was attacked and its buildings robbed and damaged.

The commandery was eventually dissolved with the rest of the Hospitaller's possessions in England in April 1540 and the last prior, Thomas Dingley, was executed in July 1539. The last remains of the chapel of the commandery were still standing in 1643, but were pulled down in about 1697. By this time a new manor existed inside the moated site, and it is possible that remains of the medieval commandery were incorporated into these 17th century buildings.

In 1601 Elizabeth and Sir William Russell undertook extensive alterations to what was then known as “Shingay Hall” and later as “Shingay House”, including the insertion of new windows and a staircase, and the complete rebuilding of some rooms. The house then included a hall, a dining room, a great chamber and a two-storey porch. In 1674 the building had 25 hearths. From the mid-17th century the house was usually leased to farmers, but the owners reserved a few rooms for their occasional use. By 1792 Shingay House, perhaps the Hall of the commandery itself, had been divided into tenements for the poor. In 1796 it was demolished and the materials, mostly bricks, were sold. Some old stonework was also incorporated in the outbuildings of the present Manor Farm.

Little is known about the medieval layout of the site. According to “Pastscape”; “The buildings of the commandery survives only in outline, the foundations forming a rough L-shape”. During my own visit to the site in May 2013, however, I was able to spot more shapes in the landscape. The entire site actually contains more than 20 preserved earthworks, some of them up to 2 feet high. The site has been identified as being of archaeological importance, due to preserved written historical sources dealing with Shingay Hospitaller commandery as well as notes in the Cambridgeshire Historic Environmental Record for the area.



Fig. 6. The northern part of the preserved moat. This section of the moat was in the Medieval period probably a mill race. The remains of a possible mill are preserved some 50m to the northwest of the Scheduled Monument.



Fig. 7. Worked limestone found in the moat that surrounds the site. These fine architectural details are of a high quality and have probably been inserted in a gothic stone structure belonging to the medieval commandery.

Results

As two different instruments were used in the central part of the site, a Bartington 601 Gradiometer and a TR/CIA resistance meter, the best results for this area are given if the two maps, which were produced by the two instruments, are studied side by side or even on top of each other.

While the gradiometer is quicker to use, and is more likely to pick up magnetic changes in the ground, the resistance meter is slower and is registering changes in resistance in the ground. The research team was therefore able to cover larger areas with the gradiometer (the grey areas outside the moat are actually outside the Scheduled Monument). For this reason the two maps look slightly different, even if some general trends can be seen (Fig. 8-9).

The most striking results are the various features that were picked up by both instruments in the central part of the site. There is no question that one (or more) substantial stone or brick construction was once situated in the central parts of the site. It is hard, however, to determine whether all these features are contemporary: We know that the Hospitaller commandery and a later hall were both situated within the central parts of the site. For this reason the various features can theoretically be dated to a timespan of about 800 years.

Even if some of the original foundation walls from the Hospitaller commandery were incorporated in the Post-Medieval hall it would require a full scale archaeological excavation of the site in order to draw any more definitive conclusions regarding the dating of various walls, foundation trenches, ditches and other features present in the area.

Some reasonable interpretations can, however, be made from studying the two maps: The larger features, like the clear linear features that were picked up by both instruments, are likely to be stone- or brick walls and/or robbed foundation trenches. For this reason a new map, showing such general trends from the first two maps, can be created. On this map the most obvious features have been marked with black lines (Fig. 10).

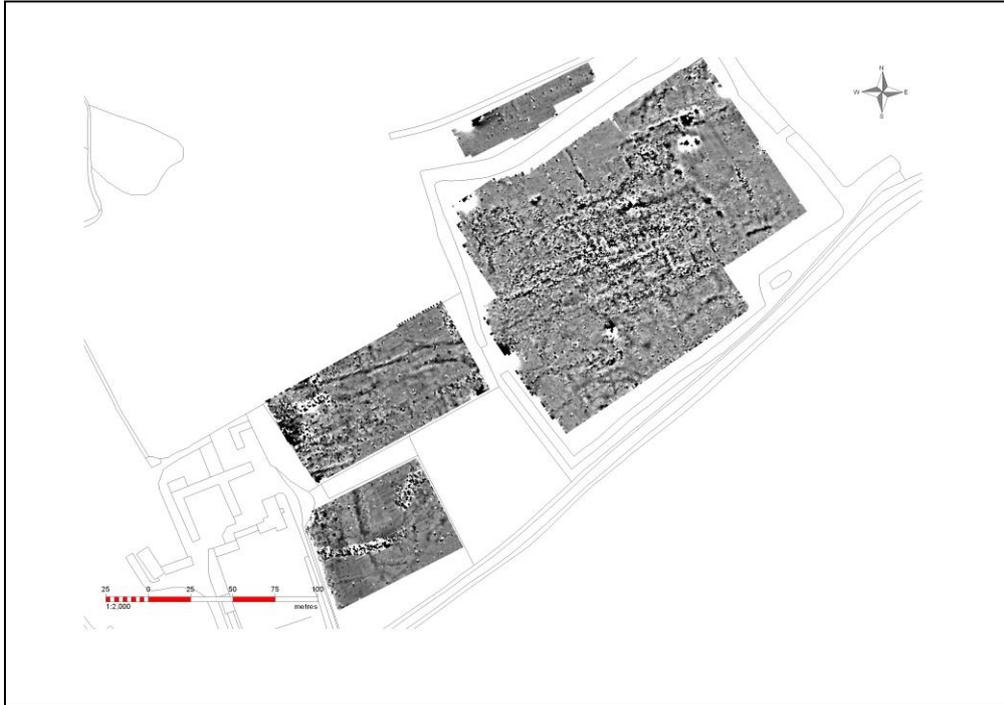


Fig. 8. The results of the magnetometer survey. The black and white fields are areas that were covered by the magnetometer inside, as well as outside, the moated site.

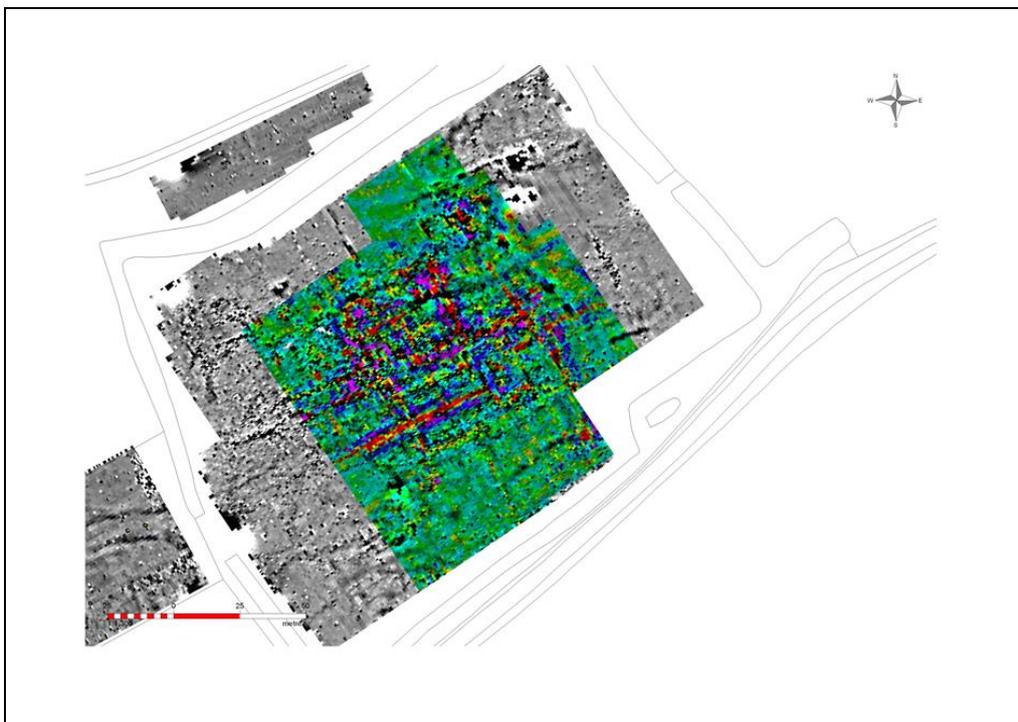


Fig. 9. The results of the resistivity survey (coloured) on top of the magnetometer.

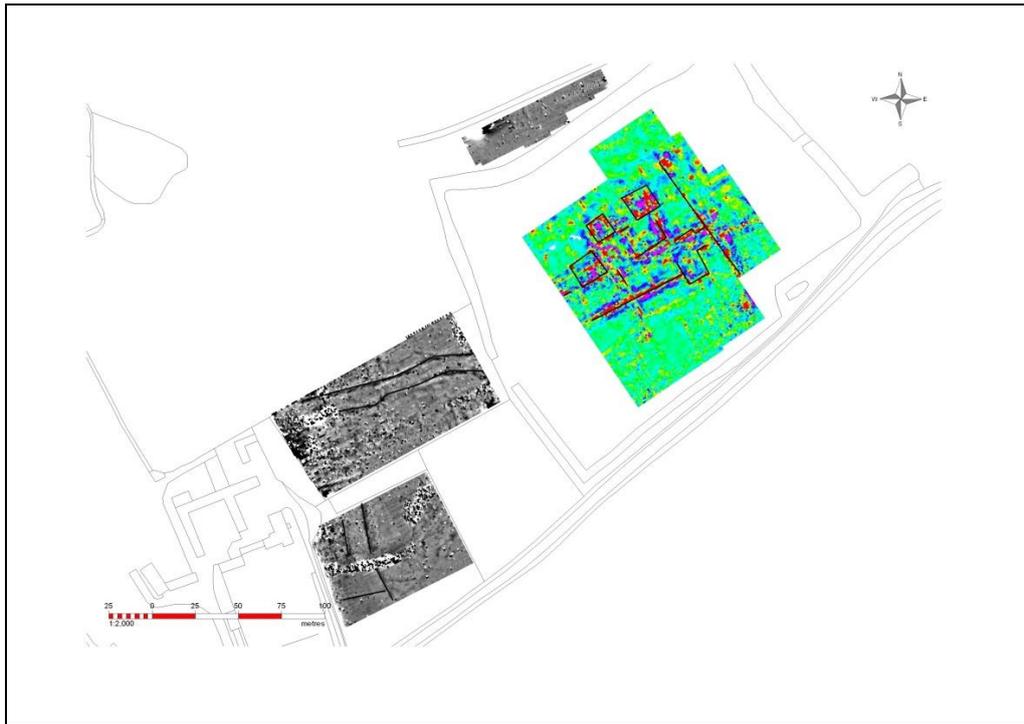


Fig. 10. The most obvious trends in the two maps: A road is leading into the moated area from the west, and a concentration of features, many of them likely to be foundation walls or robbed foundation trenches, are present in the central part of the site. There is also a concentration of features that were picked up by the gradiometer in the south west corner of the site.

Another tendency that can be seen in the maps is that the gradiometer was able to pick up more debris from the former buildings. Such debris is shown as spreads of black and white dots over the magnetometer map, and is causing the linear features to stand out less clear than on the resistivity map. If such debris consists of fired material, such as bricks, it is likely to show up more clearly on the magnetometer map. The four large white blobs on the magnetometer map are, for instance, most likely modern burning sites. The present owner, Mr Amey, kindly informed the research team that he is sometimes burning dead grass and branches in the area.

Another issue, that is important to be aware of, is that walls from different occupation periods might have had slightly different alignments, so a new foundation trench could have been dug parallel to an older wall in order to replace it. Different foundation walls can also consist of different building materials, something that would give different results on different maps.

Most of the red and yellow on the resistivity map are, however, probably foundations or paved areas. There may also be a cobbled surface and some other structures bottom right. As few features show up in this area on the magnetometer map it is likely to be a concentration of stones. Some of the darker lines that are running all the way out to the moat are likely to be drainage ditches.

Discussion

There is no question that the site of the former Hospitaller commandery in Shingay cum Wendy, Cambridgeshire, has a fantastic archaeological potential. The geophysical survey has clearly shown that a number of various features are preserved within the area. The most obvious remains consist of preserved foundation walls and/or rubbed foundation trenches from various demolished buildings. Other features consist of ditches, paved areas and concentrations of fired building material.

In order to fully understand the site a full scale archaeological excavation of the site would be necessary. Being a Scheduled Monument, however, the site has a strong protection by English laws and is therefore worth to preserve for the future. Since a Hospitaller commandery was an important complex on the medieval English countryside many features, that are not forming part of the Scheduled Monument inside the moat, are likely to be preserved in the surrounding landscape. Further investigations of the area could for instance reveal backfilled fishponds, remains of demolished mills and/or marker stones for the former Hospitaller lands.

Another important question deals with what traces of medieval economy buildings that are still preserved in the area. Such buildings were crucial for the running of a Hospitaller commandery, but postholes and beam slots from supporting structures are less likely to be detected during a geophysical survey. The only way to fully understand such structures are therefore limited archaeological excavations, presumably close to the edges of the moated site, where such buildings are expected to be found.

If one study both the resistivity map and the magnetometer map side by side it is striking how few features that were found close to the edges of the moated site. This is, however, not surprising as it is the most likely location for potential economy buildings. The outer areas of the Scheduled Monument were therefore, most likely, not empty in the Medieval period, but the surveying instruments are simply not able to pick up the faint traces from such simple buildings. The expected number of economy buildings at a Military Order site is clearly indicated by the above mentioned, fully excavated, Templar Preceptory at South Witham in Lincolnshire.

Of equal importance is to understand the development of the site in the Post-Medieval period, when Shingay Hall was built on the site and walls and other features from the medieval complex could have been reused and integrated in the younger structure. Important questions to answer are for instance: What walls and other features belong to what period, and to what extent were the older buildings rebuilt and reused?

A limited archaeological, and especially tailored, research excavation in the areas between the centre of the site and the moats could give us the answers we are looking for when it comes to the missing economy buildings at Shingay Hospitaller commandery. These buildings are crucial for the understanding of the economy of the medieval complex, and could add a huge amount of information to this remarkable archaeological site;

-How large was the surrounding farming land?

-What animals were kept by the Hospitallers?

-How much could the commandery contribute to the Order's headquarters at Clerkenwell in London each year?

-What seeds and other plants can be found in the various economy buildings, and what can this tell us about the Hospitaller economy?

Sources

Ordnance Survey Map (Scale / Date)

OS 6" 1960

Proceedings of the Cambridge Antiquarian Society

W.H. Shimield. 1888-91. Pages 136-47

The Victoria history of the county of Cambridge and the Isle of Ely: Volume 2. Edited by L F Salzman, M.A., F.S.A. 1948.

The Victoria history of the counties of England. Pages 266-9

Medieval religious houses in England and Wales. Edited by David Knowles and R. Neville Hadcock. 1971.

Pages 284,300 and 306

Deserted Mediaeval Villages. Beresford & Hurst. 1971.

Page 184.

Aerial photography

St Joseph ER 058-9

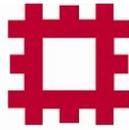
Aerial photography

Crawford 1272/12/31; 1451/12/35; 1452/12/36

Field Investigators Comments

F1 BHS 23-NOV-72

DOE (IAM) Records Form 1976



ENGLISH HERITAGE

English Heritage Geophysical Survey Database Questionnaire

Survey Details

Name of Site: Shingay-cum Wendy, Site of Knights Hospitaller Commandery

County: Cambridgeshire

NGR Grid Reference: TL 3104 4734

Start Date: 1 December 2013

End Date: 31 May 2014

Geology at site: Sandy-silty soils over gault formations and undifferentiated-mudstones

Known archaeological Sites/Monuments covered by the survey: Scheduled Monument: 1006852;
CB 108

Archaeological Sites/Monument types detected by survey: Building remains consisting of foundation walls and possible rubbed foundation trenches, and ditches dating to the Medieval, and possible Post-Medieval? periods.

Surveyor: Dr Christer Carlsson and the Archaeology RheeSearch Group.

Name of Client, if any: No client. It was a research investigation. The landlord and owner of the land

was Mr Nicholas Amey.

Purpose of Survey: It was a research investigation. The purpose was to find out if there are any remains preserved beneath the ground from the Knights Hospitaller complex dating from the 12th-15th century.

Location of:

a) Primary archive, i.e. raw data, electronic archive etc: For now at documentation is at the home of Dr Christer Carlsson, but all paperwork and raw data will be handed over to the HER as soon as possible.

b) Full Report: A full report over the investigation has been completed. Hard copies of the report will be sent to the HER, NMR, English Heritage and the landlord. The report is named "*Results of a Geophysical Survey at Shingay Hospitaller Commandery. Cambridgeshire. 1 December 2013- 31 May 2014*".

Technical Details

Type of Survey: Magnetometer

Area Surveyed, if applicable: 40 906m²

Traverse Separation, if regular: 0.5m

Reading/Sample Interval: 1m

Type, Make and model of Instrumentation: Bartington 601 Gradiometer

For Resistivity Survey: -

Probe configuration: -

Probe Spacing: -

Technical Details

Type of Survey: Resistivity

Area Surveyed, if applicable: 15 625m²

Traverse Separation, if regular: 0.5m

Reading/Sample Interval: 1m

Type, Make and model of Instrumentation: TR/CIA resistance meter

For Resistivity Survey:

Probe configuration: Twin probe array configuration. It employs a pair of mobile probes, mounted 0.5m apart in a frame, connected by a 50m cable to a pair of remote probes.

Probe Spacing: 0,5M

Land use at the time of the survey: Grassland- Pasture.

Additional Remarks: A break in the survey was made over the wet winter period, when the site was partly flooded. The survey was therefore completed in the spring 2014.

List of terms for Survey Type

Magnetometer (includes gradiometer)

Resistivity

Resistivity Profile

Magnetic Susceptibility

Electro-Magnetic Survey

Ground Penetrating Radar

Other (please specify)

List of terms for Land Use:

Arable

Grassland - Pasture

Grassland - Undifferentiated

Heathland

Moorland

Coastland - Inter-Tidal

Coastland - Above High Water

Allotment

Archaeological Excavation

Garden

Lawn

Orchard

Park

Playing Field

Built-Over

Churchyard

Waste Ground

Woodland

Other (please specify)