# Millennium Green Post-Survey Report

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This report details the results and interpretation from the archaeological field work (resistivity survey) which was carried out at the Millennium Green, Stanford in the Vale, Oxfordshire.

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**Site:** Millennium Green, Stanford in the Vale, Oxfordshire

**Date:** 2012

**Project type:** Research Project and Geophysical Survey

**Museum accession No.:** SF12.

**NGR:** SU 34241, 93348

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#### 1. Introduction

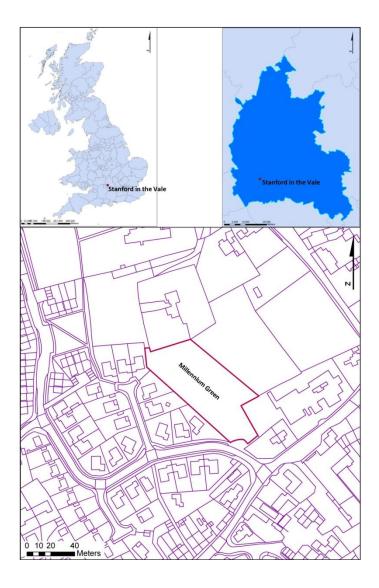
1.1 This document discusses the results from the geophysical work carried out within the Millennium Green, Stanford in the Vale, Oxfordshire, during 2012. This work is part of an on-going research project examining in detail the archaeology, and in turn the heritage, of the village of Stanford in the Vale, under the project name: The Stanford in the Vale Archaeological Research Project.

1.2 Within this document the following areas will be discussed: the aims and objectives of the project; the archaeological and historical background of the site, and of the area within the direct vicinity of the site; the methodology of the work carried out; the results; an interpretation of the results; and lastly any further work which could be proposed to be carried out.

#### 2. Site Location and Description

- 2.1 The site is located in the village of Stanford in the Vale, Oxfordshire on the High Street and adjacent to the Manor House. The location of the site is at NGR SU 34241, 93348 (Centre).
- 2.2 The area of the site is about 108 m long NW-SE by 42 m wide SW-NE (widest point), so giving an area of 4,117 m<sup>2</sup>. The location and area of the site can be seen in Figure 1.

Figure 1. This map shows the location of the site at a national, county and local level.



#### 3. Project Aims and Objectives

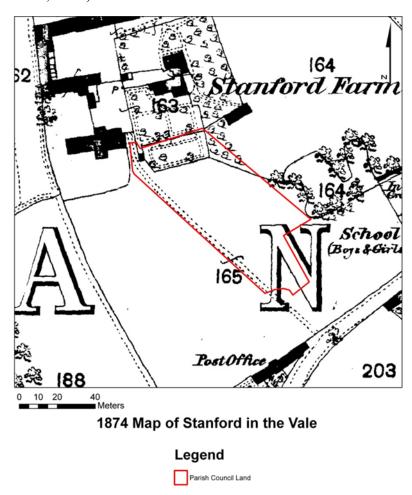
- 3.1 The aims and objectives of the project, which this work is undertaken within, are split into three main areas:
  - To gain a further and greater understanding of the archaeology of Stanford in the Vale.
  - To either prove or disprove the following hypothesis: Stanford in the Vale was planned as a 10 acre medieval market town which had failed by the end of the medieval period. At this point Stanford in the Vale formed into a village.
  - To get the local community involved in their local heritage and archaeology.

#### 4. Archaeological and Historical Background

- 4.1 The site is located in the centre of the historical village, on the High Street and adjacent to the village manor house. The geology underlying the site is Stanford Formation Limestone and it is approximately 73 m above sea level.
- 4.2 On the site itself no known archaeological and very little historical information is known. However, a large amount of archaeological remains have been found within close proximity to the field so giving an idea of the possible buried remains beneath the survey area. The earliest known activity surrounding the site dates to the Mesolithic period, shown by large quantities of flint scatters found in the surrounding area (Stebbing, 1977, p. 8). Also, further prehistoric evidence has been found, that of both Neolithic and Bronze Age flint scatters (Stebbing, 1977, p. 8) (Ashby, 2010, p. 9) (HER 26340 MOX23767). This evidence shows prehistoric activity in the direct area surrounding the site.
- 4.3 From the Roman period, a larger quantity of finds material has been found, both on the site and in the surrounding area. This includes artifacts, including: 3 pottery sherds found in the gardens of the Manor House 27 m to the N of the site (English Heritage, 2007a) (HER 7560 MOX957); Roman pottery and a coin found 265 m to the SE of the site; and a spindle whorl found 280 m to the W of the site (English Heritage, 2007b) (HER 7986 MOX960). In addition, excavations within the village have revealed Roman remains including: ditches, pits and gullies at Firtree Nurseries (NMR, English Heritage, 2007c), about 200 m to the E (HER 15952 MOX995); and ditches at both 27 High Street and on land to the rear of Wentworth Supermarket (now the Co-op), about 110 m to the S (Oxfordshire HER, 2012, p. 12) (HER 15888 MOX993). Lastly, during work on the construction of a new rising main in 2009, two Roman cremation burials were found about 240 m to the S of the site (Cotswold Archaeology, 2009, p. 5) (HER 26470 MOX23909). From this evidence it may be suggested that the Roman settlement of Stanford in the Vale was located in this area, as well as a possible Roman cemetery.
- 4.4 At present, from the Anglo Saxon period there is only an extremely small amount of evidence, that of only 4 features dating from this period from across the whole village.
- 4.5 From the Medieval and early Post Medieval periods there is a vast increase in activity in the area surrounding the site. From the medieval period there is a large amount of evidence from finds spots, excavations and standing buildings, suggesting there was an abundance of activity occurring at this time, surrounding the site. This includes artifacts found at the Manor House (20 m to the N), that of: a unique Bronze Skillet dating to the 13<sup>th</sup> – 14<sup>th</sup> C AD (Dunning, 1962); a bone spindle whorl; pottery; and bronze sheet (NMR, English Heritage, 2007c) (HER 7560 - MOX957). Furthermore during excavations medieval features have been found such as: pits at The Grange Nursing Home (170 m to the N) (HER 16801 -MOX12566) and 27 High Street (110 m to the S) (NMR, English Heritage, 2007c); a ditch and pit on land to the rear of Wentworth Supermarket (now the Co-op) (110 m to the S) (Oxfordshire HER, 2012) (HER 15888 - MOX993); and a large quantity of medieval buildings and structures, including a possible water mill, during other excavations in the village (Ashby, 2010). Lastly, during recent archaeological geophysical work carried out in the adjacent fields of Ashdown House, directly to the E of the survey area, a large quantity of possible medieval features have been identified. These possibly include: substantial structures; large wall features and buildings; ditches; and part of the village pond (Ashby,

- 2012, p.15). Some of these features are thought to possibly continue under the Millennium Green field.
- 4.6 From the information detailed above it is presently thought that by the end of the 12<sup>th</sup> 14<sup>th</sup> C AD Stanford in the Vale was a large medieval settlement, with the current theory of it being a medieval market town, which by the end of the 14<sup>th</sup> C had collapsed into a much smaller village. This is further supported by documentary evidence that Stanford was granted a market in 1230, which possibly took place on Church Green (Maine, 1866, p. 19).
- 4.8 During the Post-Medieval period further information can be gained for the area surrounding the site. This includes the construction of the current Manor House which is adjacent to the site. This was constructed in 1618, but was built on top of an earlier foundation (Berkshire Federation of Women's Institutes, 1979, p. 135), possibly Norman in date. This is as a manor was known to have been constructed within the vicinity of the current Manor House by Henry de Ferrers at the time of the Doomsday Book (1085) (Page & Ditchfield, 1924).
- 4.7 During the Post-Medieval period, historic maps of the site start to be produced. Such as seen in Figure 2, an 1874 map, all other historical maps both pre- and post-dating this one, dating back to 1760, show the area where the present site is as an open field or area of land, and, at its northern end, part of the formal gardens of the Manor House. However, the 1874 map does show a possible small building located within the north west corner of the survey area, as well as two possible boundary walls: 1, the boundary wall for the Manor House gardens, in the northern part of the survey area; 2. A field boundary in the north east side of the survey area. Furthermore, from the map evidence, it can be seen that the field was owned by Stanford Farm, dating up until 1890. Also shown from the Tithe Award of 1846, the land was owned by John Morrison Esq and tenanted by William Tarrant and the land type was pasture (Howse, 1994, p. 16). From this map data, it may indicate that the archaeology within this area of the village will be well preserved, and date to many periods. Previous archaeological work which has been carried out in the area directly surrounding the site also shows that there is likely to be archaeological remains from multiple periods underlying the survey area.

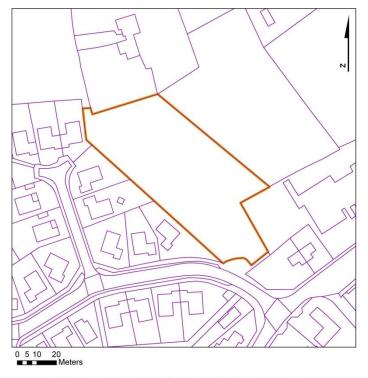
Figure 2. This map, from 1874, shows the area of the Millennium Green, prior to its construction (EDINA, 2011).



5. Geophysical Survey (Resistivity)

5.1 Given the likely hood of the nature of the buried remains, a resistivity survey is proposed to be carried out to locate any buried archaeological features on the site. Due to the size of the site, and in turn, the close proximity of the edge of the grids to metal features such as fences, resistivity will be used to survey the site, as magnetometry results are likely to become distorted by these modern structures. The location of the area within the site in which the resistivity survey is proposed to be carried out can be seen in Figure 3.

Figure 3. This figure shows the location and area of the resistivity survey to be carried out on the Millennium Green Field.



Millennium Green Geophysical Survey Area

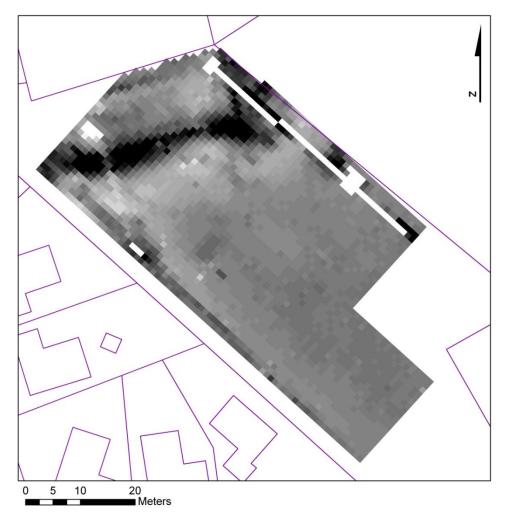


- 5.2 The resistivity grids will be laid out using tapes, in the usual method, in the size of 20 m by 20 m. Once this has been done the NGRs for the four corners of the grid will be recorded using a Builder R100M total station. These grids will be surveyed, using the resistivity meter as fully as possible, with dummy readings being inserted where it is not possible to survey a full grid square due to geographical, topographical or other unknown circumstances.
- 5.3 The resistivity survey will be carried out using a Geoscan RM 15 with a twin electrode configuration (Geoscan Research, 2005, p. 2). Each grid will be surveyed using a series of zigzag traverses spaced at 1m intervals. Mobile probes spaced at 0.5 m will give an effective sub-surface penetration of between 0.5 m and 1.0 m, with larger features showing at a greater depth. The readings will be automatically logged at 1m intervals giving a resolution of 400 readings per 20 m x 20 m square.
- 5.4 Upon the completion of the survey, the geophysical data was transferred from the portable computer to a desktop PC for processing and interpretation using a combination of Geoplot 3.0 (Geoscan Research, 2010) and Arc GIS 9.3.1 (ESRI, 2009). Within Geoplot the data was passed through despike, low pass filter and a high pass filter. The survey was then geo-referenced onto an Ordnance Survey 1:10,000 base map, providing an orientation and scale.

#### 6. Results

6.1 The results from the resistivity survey carried out during this season's work are seen in Figure 4. Also seen in Figure 5, are the separate features, outlined in red. Interpretations of the features which are shown on the plot are described below in Section 7 of this document.

Figure 4. This map shows the results from the resistivity survey carried out within the Millennium Green field, Stanford in the Vale, Oxfordshire.



### Millennuim Green Resistivity Survey Results



Figure 5. This map shows the location of features shown on the resistivity data (in red).





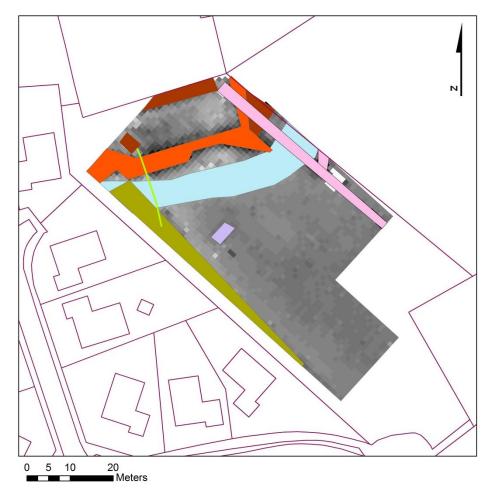
6.2 The results shown in Figure 5 show ten main features, of both high and low resistance, and which both extend off the edge of the survey area. The first anomaly is that of a sub-rectangular feature, which extends off the SW edge of the plot, and can be seen at point 1 on the plot. This is a high resistance (1 to 17 ohm's) feature measuring 72.4 m long by 3.8 m wide. The second anomaly is that of a sub-rectangular feature and can be seen at point 2 on the plot. This is a high resistance (1 to 2 ohm's) feature measuring 5 m long by 2.8 m wide. The third anomaly is that of a sub-rectangular feature, which extends off both the NE and SW edges of the plot, and can be seen at point 3 on the plot. This is a low resistance (-9 to -5

ohm's) feature measuring 44.8 m long by 11.5 m wide. The fourth anomaly is that of a linear feature and can be seen at point 4 on the plot. This is a low resistance (-11 to -4 ohm's) feature measuring 18.8 m long by 1.5 m wide. The fifth anomaly is that of a sub-rectangular feature, which extends off both the N and W edges of the plot, and can be seen at point 5 on the plot. This is a high resistance (11 to 31 ohm's) feature measuring 38.9 m long by 4.3 m wide. The sixth anomaly is that of a sub-rectangular feature and can be seen at point 6 on the plot. This is a low resistance (-21 to -19 ohm's) feature measuring 4 m long by 2.8 m wide. The seventh anomaly is that of a sub-rectangular feature, which extends off the N edge of the plot, and can be seen at point 7 on the plot. This is a high resistance (2 to 8 ohm's) feature measuring 18.3 m long by 2.7 m wide. The eighth anomaly is that of a sub-rectangular feature, which extends off the NE edge of the plot, and can be seen at point 8 on the plot. This is a high resistance (6 to 17 ohm's) feature measuring 8.2 m long by 7.6 m wide. The ninth anomaly is that of a linear feature, which extends off the SE edge of the plot, and can be seen at point 9 on the plot. This is a high resistance (12 to 28 ohm's) feature measuring 50 m long by 1.7 m wide. The tenth anomaly is that of a sub-rectangular feature, which extends off the E edge of the plot, and can be seen at point 10 on the plot. This is a high resistance (8 to 20 ohm's) feature measuring 4.1 m long by 2.9 m wide.

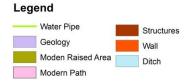
#### 7. Interpretation

7.1 From the results, explained above, and the ten features which have been identified on the results an interpretation can be made about each of the features in turn. The interpretation of the features can be split into three main areas: 1. Modern features and geology; 2. Ditch; 3. Structures and Wall. The current interpretation of all these features can be seen in Figure 6.

Figure 6. This map shows the location and interpretation of the features shown on the geophysical data.



Millennium Green Resisitivity Survey Interpretation



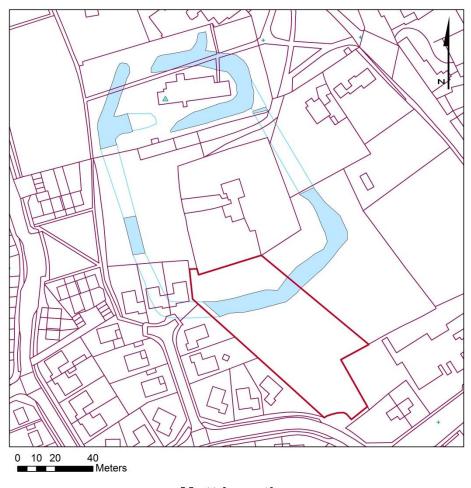
#### 7.2 Modern Features and Geology

7.2.1 The first type of feature which can be seen on the resistivity plot is that of a series of possible modern features which are located at anomalies, 1, 4, 9 and 10, and one geological anomaly, 2. The anomalies thought to be modern in date are due to them being observed to cut through other features, shown on the plot. The current interpretation for these features is: a modern raised area, related to the fields prior use as agricultural land; two modern asphalt foot paths which run through the field; and a modern buried service, thought to be a water pipe.

#### 7.3 Ditch

7.3.1 The second feature, anomaly 3, has been interpreted as a continuation of the ditch identified on the Ashdown House, Manor House and church geophysical surveys, which can be seen to surrounds the Manor House, and in turn church, as seen in Figure 7. From excavation works in the adjacent field this feature has been dated to the 10<sup>th</sup> C and so is interpreted as a Saxon Mott ditch. It can also be seen on the site that the feature is located over a large drop that on the edge of an earthwork, meaning the area surrounded by the ditch is on a raised plateau of ground compared to the rest of the village, so giving feather wait to the augment that the Manor House is a Saxon Mott.

Figure 7. This map shows the location of the possible Mott ditch as identified on other geophysical survey areas.



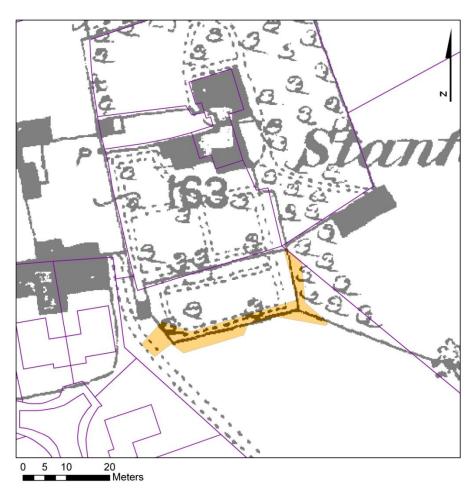
#### **Mott Location**

# Legend Millennium Green Mott Ditch Mott Ditch Projection

#### 7.4 Structures and Wall

7.4.1 Lastly four features lying to the north of the ditch have been identified, and are thought to be structure or wall features. The first of these is anomaly 5, the remains of a wall identified on the 1800s map, relating to the Manor House, see Figure 8. This wall may overlie earlier features, or an earlier medieval boundary wall, however only archaeological excavation or further geophysical work would confirm this. The second feature, anomaly 8 is interpreted as either a dump of demolition rubble from the removal of the wall or is related to the structural feature identified in the North West corner of the Ashdown House plot. The third feature identified is anomaly 7, and is thought to possibly be related to formal gardens laid out within the Manor House grounds, or an earlier structure, as seen on the Ashdown House plot, such as a service building. The last feature identified, anomaly 6, is not fully understood at present, but may relate to the adjacent modern water pipe or a structure within the Manor House grounds, such as a backfilled pond or water tank, which would hold more moisture than the surrounding soil.

Figure 8. Map showing the location of a demolished wall, possible part of an earlier medieval structure.



Possible Demolished Medieval Wall or Structure

Legend

Possible Medieval Wall/Structure

#### 8. Conclusion

8.1 In conclusion from the geophysical survey undertaken it can be seen that the archaeology underlying the field is concentrated to the most northern third of the field. Apart from the modern and geological features identified, the other features are thought to relate to the adjacent Manor House, from multiple periods. The earliest of these features is thought to date to the Saxon period (10<sup>th</sup> C), and forms part of the Mott ditch which has been found to surround both the Manor House and the village Church. The other features identified are formed of walls and structures, thought to be medieval and post medieval in date. These are formed of a large boundary wall and associated rubble, which are thought to have surrounded the Manor House grounds until at least the 1800's. A series of possible features relation to the formal gardens of the Manor House have also been found. It should be noted that these features are now seen as earthworks underlying the current field.

#### 9. Further Proposed Work

- 9.1 From the features identified and interpreted above, further archaeological work can be proposed to be carried out, that of: small scale excavation works; and Ground Penetrating Radar (GPR).
- 9.2 The first area of proposed further work would be that of small scale excavation. This would be proposed to be carried out in one main area of the site, to examine and confirm the function and date of anomaly 5, the possible Manor House boundary wall, identified on the plot. This excavation work would also be used to examine any earlier phasing of the boundary wall and characters these phases, and also to help with our understanding of the construction and date of the raised platform that it sits on.
- 9.3 The second area of proposed further work which could be undertaken on the site, would be that of a Ground Penetrating Radar Survey (GPR). GPR is a non-invasive technique which uses beams of Radar to map the underlying archaeology to a maximum depth of 3 m, in 10cm slices. The use of this technique would help use gain a better understanding of the underlying archaeology of the historic part of the settlement, including the platform on which the manor hose features are constructed as well as the associated ditch. Lastly the GPR survey would be used to help use gain a better and further understanding of the deep Roman boundary ditch found during the Ashdown House excavations.
- 9.4 If any of the proposed work is to be undertaken, a pre site report would be produced prior to landowner's consent being granted.

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