

# 'The Dinedor Origins Project' Site of Rotherwas House, Dinedor: A Geophysical Survey.



Report prepared by

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Places and Communities Directorate

Herefordshire Council

Project commissioned by the Dinedor Heritage Group



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**Herefordshire Archaeology** is Herefordshire Council's county archaeology service. It advises upon the conservation of archaeological and historic landscapes, maintains the county Sites and Monument Record, and carries out conservation and investigative field projects. The County Archaeologist is Dr. Keith Ray.

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# **Contents**

Summary	4
1.0. Introduction	5
2.0. Location and geology	6
3.0. Historical and archaeological background	7
4.0. Aims and purpose of evaluation	9
5.0. Methodology	10
6.0. Results	12
6.1. Area 1	12
7.0. Discussion	14
8.0. Acknowledgments	15
9.0. Bibliography	16
10.0. List of illustrations	17
Appendix 1: Historic Mapping	19
Appendix 2: Resistance Survey Analysis	20

This Report follows the practice as formulated by the Institute For Archaeologists (*Ifa*), Draft Standard and Guidance for archaeological geophysical survey (IFA, 2010).

# Summary

This report and investigation was commissioned by the Dinedor Heritage Group as part of the Dinedor Origins Project, a Heritage Lottery funded project. The investigation was led and report compiled by Herefordshire Council's archaeology service.

The aim of the investigation was to identify evidence for below ground anomalies of potential archaeological significance through the process of a resistance survey centred on the scheduled site of Rotherwas House (Monument No: HE548; Scheduled Ancient Monument No: 1014880) located within the parish of Dinedor, Herefordshire. The results of the survey were to enhance the current understanding and condition of the site.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. National Grid References are accurate to approximately 10m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50 and 0.02m at 1:20m

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## 1.0 Introduction

The Dinedor Origins Project was established in October 2012 by the Dinedor Heritage Group (DHG) after receiving a grant following a successful application to the Your Heritage scheme, the Heritage Lottery Fund.

The heritage group was established by members of the public local to Dinedor within the County of Herefordshire in light of a number of archaeological discoveries as a result of infrastructural development which served to raise the profile of prehistoric activity, both within the parish of Dinedor and beyond.

In particular these discoveries concerned the activity of Neolithic and Bronze Age societies, evidence for which came in the form of barrows, settlement sites, burnt mounds and an apparently unique sinuous monument, entitled locally as the 'Rotherwas Ribbon'.

With archaeological support, guidance and training provided by Herefordshire Council's archaeological service, the Dinedor Heritage Group aim to disseminate the results of the recent discoveries to the general public in the form of a popular publication, website and promotion of a circular route which will guide walkers to sites of historic interest across a parish steeped in history.

In support of the documentary research, the Dinedor Group have invited members of the public, schools and the local sixth form college students to participate in the archaeological investigation of the little known medieval heritage of the parish. The investigation addressed within this report discusses the results of the DHG's geophysical survey of the medieval manor site of Rotherwas (HE548) located to the north of the Rotherwas Enterprise Zone within the vicinity of Rotherwas Chapel (HE547). The investigation employed the use of an RM15 Resistance Meter.

The aim of this investigation was to shed light on the extent and condition of the now buried remains of the manor.

# 2.0 Location and geology

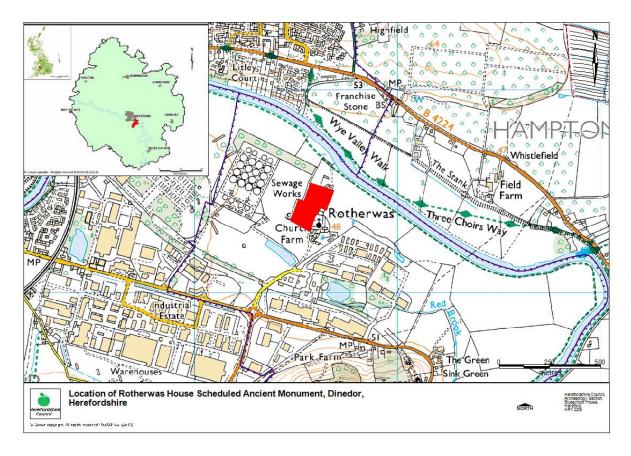


Figure 1: Location of evaluation area, Dinedor Parish, Herefordshire, UK. © Crown copyright. All rights reserved 100024168. (2013)

The scheduled monument that is the site of Rotherwas House (HER 548) is situated within the north of Dinedor Parish, Herefordshire (SO 5355 3839) at approximately 45m above sea level. Some 300m to the north the site is bound by the River Wye whereas to the south, east and west lies the Rotherwas Enterprise Zone, an industrial estate located on the site of Rotherwas Royal Ordnance Factory established during the Great War.

The solid geology is of Raglan Mudstone formation which is made up of interbedded siltstone and mudstone formed between 417 and 419 million years ago during the Silurian period. The site of Rotherwas House is located upon a gentle slope that extends to the River Wye located to the north.

# 3.0 Historical and archaeological background

One of the earliest accounts of the manor of Rotherwas (Retrowas) comes from the Domesday Book wherein Rotherwas Manor was owned by Gilbert, son of Thorold (Thorn, 1983). Prior to this the manor was held by Sigeric.

The origins to the name Rotherwas is likely to take its-self from the Old English "hryther" meaning cattle and "waesse", a west-midlands place name for land by a major river (in this case the River Wye) liable to sudden flooding (Copplestone-Crow, 1989).

The house was later owned by the Walshes who preceded the Bodenhams. The Bodenhams owned the manor from about the middle of the fifteenth century, from which it was their principal seat. Thomas Blount described the house in 1675 as "This is a delicious seat, situate near the river Wye and within two myles of Hereford, abounding with store of excellent fruit rich meadows, and fertyle arable; having also a Park within less than half a myle of the House where-there is a neat Lodge, upon a Hill ..." (Botzum). The hill is question is that of Dinedor Hill, a prominent northeast to southwest aligned ridge. Rotherwas Park Wood is located upon the eastern end of the ridge; the site of the Lodge is currently unknown. By this date however, Blount notes the building and estate to be in a state of disrepair due to the Bodenham family's loss of wealth due in part to their support of King Charles I during the civil war.

It was not until the 1700's that the Bodenham family regained their wealth and in 1731 they built a new house in a different location out of red brick. The house passed through marriage to the Lubienski family and in 1907 the mansion burnt but survived with minimal damage. In 1912 the estate and house was put up for auction and was tenanted, during the First World War the house was employed as a barracks, housing staff of the National Filling Station. The house and was finally demolished in 1926 (HER 548).

The available historic mapping, of which the 1840 Tithe Map (figure 3) provides the earliest detailed plan of the estate, allows for a general understanding of the land use and management over time. It is clear from the mapping that the site of Rotherwas House underwent multiple phases of enhancement and rebuild until its demolition in 1926 as evident on the Second Edition Revised County Series Survey published between 1904 and 1939 (figure 5).

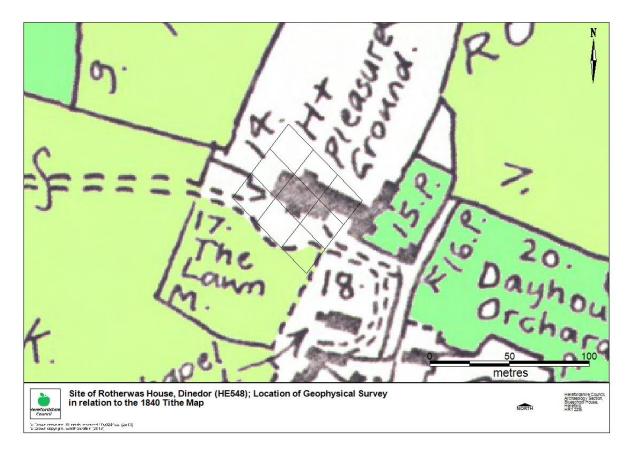


Figure 2: 1840 Tithe Map indicating the location of Rotherwas House and its associated gardens © Crown copyright Geoff Gwatkin (2013)

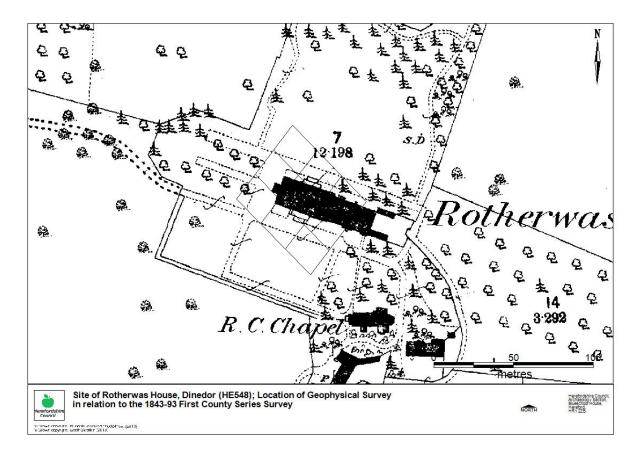


Figure 3: 1843-93 First County Series Survey indicating the location of Rotherwas House and its associated gardens © Crown copyright (2013). All rights reserved 100024168.

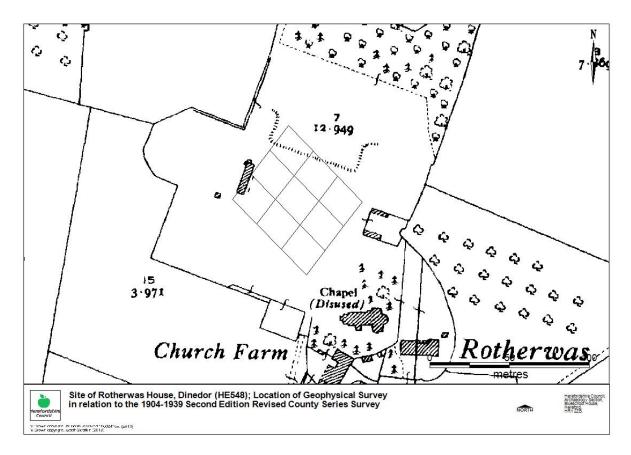


Figure 4: 1904-39 Second Edition Revised County Series Survey indicating the location of Rotherwas House and its associated gardens © Crown copyright (2013). All rights reserved 100024168.

# 4.0 Aims and purpose of the evaluation

It was the purpose of this investigation to investigate by means of a geophysical survey the site and potential buried remains of Rotherwas House, Dinedor. The results would enhance the interpretation and understanding of the monument.

The aims of this evaluation were to:

- 1. Guide and fully involve DHG members and volunteers through the process of geophysical evaluation.
- 2. To identify any buried anomalies that may indicate evidence for settlement activity associated to the site of Rotherwas House.
- 3. To confirm the extent and foundation plan of Rotherwas House prior to its demolition in the early 20<sup>th</sup> century as well as to highlight any anomalies that may represent earlier phases in the manors construction.

# 5.0 Methodology

A geophysical survey of 'Site of Rotherwas House, Dinedor, Herefordshire (HE548) was carried out on 28<sup>th</sup> February 2013. The survey was concentrated within an area immediately to the northwest of Rotherwas Chapel (HE547) (figure 6) and approximately 150m south of the remains of Rotherwas Manor's walled garden. The site was identified as it represents the location of Rotherwas House. Earth resistance survey was favoured over the use of a magnetometer as it was expected that the investigation would encounter buried masonry and building foundations (Jones, 2008).

The geophysical evaluation consisted of a resistivity survey employing the use of a Geoscan RM15 Resistance Meter in a twin electrode configuration with the remote probes spaced 50cm apart in order to obtain resistance measurements to a depth of 75cm. In total nine 20mx20m square grids were evaluated (figure 5) over a 60m x 60m area. The geophysical evaluation was performed within each measured grid commencing from within the northwest corner and extending east on the first traverse to return west in order to continue a zig-zag pattern. Meter readings were obtained at 1m intervals. The resulting data was downloaded and manipulated using *Geoplot 3.0* before being transferred and geo-rectified using *MapInfo Professional 10.5* onto both the modern and historic mapping resources.

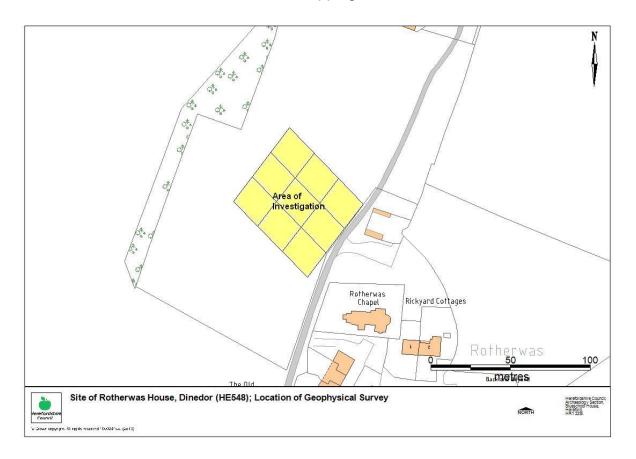


Figure 5: Location of geophysical grids within the scheduled monument (HE548). © Crown copyright (2013). All rights reserved 100024168.

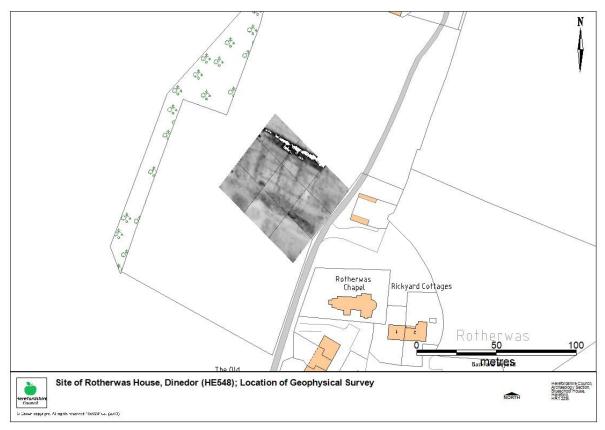


Figure 6: Location and results of the geophysical survey within the area of the scheduled monument (HE548). © Crown copyright (2013). All rights reserved 100024168.

## 6.0 Results

### 6.1 Area 1

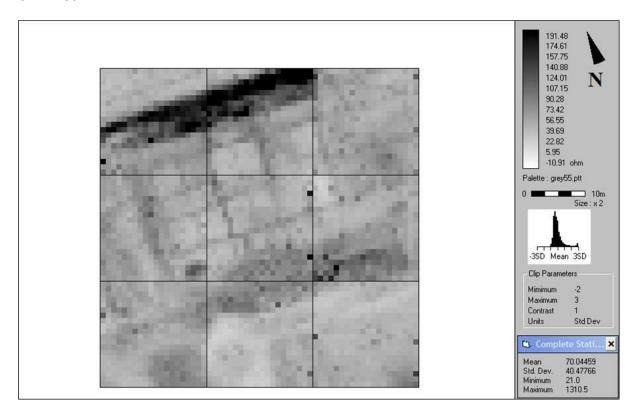


Figure 7: Raw resistance data from across the site of Rotherwas House designated a scheduled ancient monument (HE548). © Crown Copyright, Geoplot Version 3.0 (2013)

The 60m x 60m (oriented northeast-southwest) area was located over the site of Rotherwas House situated immediately to the northwest of Rotherwas Chapel. The survey was carried out in cold damp conditions. The site of the house is prominent within a field of unimproved pasture as a complex of raised platforms. Across the site are a number of hollows attributed to subsidence. The location was chosen for geophysical analysis due to the potential for identifying the floor plan indicative of the multi-phase construction of Rotherwas House.

The results of the resistance survey provided a swath of readings from between 5.95 Ohms and 191.48 Ohms (figure 7). The lower readings in Ohms would suggest the underlying soils to be less resistant (waterlogged/wet conditions, alluvial soils, buried ditches, pits) to the passing of a weak electric current; whereas the higher reading would indicate areas of increased levels of resistance (solid geology, well drained soils, buried structural remains).

The anomalies encountered as a result of the survey clearly highlight the buried foundations of Rotherwas House, as well as some anomalies that appear to represent garden features such as buried trackways and terraces including some drains. The house site stands out as a series of linear anomalies of high resistance that depicts the wall foundations. It is clear from the layout that the stronger

resistance anomalies represent the locations of the load-bearing walls of the final three-bay structure that stood at the site prior to its demolition during the 1920's (figure 3). Beyond this it is also possible to identify a number of partition-wall foundations, each of which subdivides the house to provide individual rooms.

Of particular note is the very strong anomaly of high resistance parallel with the building to the north. Topographically the ground drops sharply away from the house platform at this location to form a terrace. The historic mapping highlights this as representing a track and terrace overlooking the gardens to the north (figure 5). The strong resistance reading is likely the result of the material used to construct the terrace and house platform.

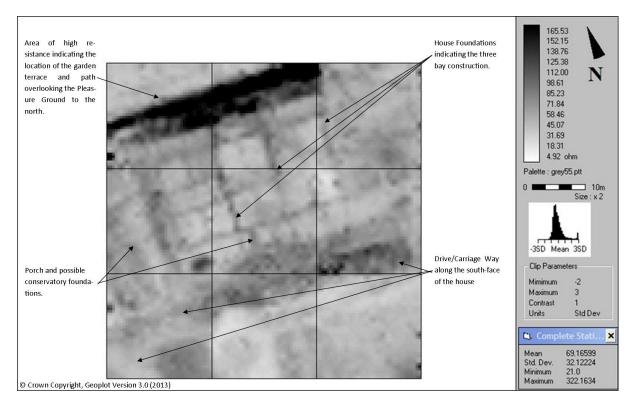


Figure 8: Annotated resistance survey results for the Rotherwas House site, scheduled monument HE224. © Crown Copyright, Geoplot Version 3.0 (2013)

To the south of the house site are a number of anomalies which, through relating to the historic mapping can be interpreted as carriageways/paths that give access to the site.

### 7.0 Discussion

The results of the geophysical survey were successful in identifying the foundations of Rotherwas House as well as its associated trackways. It is clear however that much landscaping has taken place between the stages of rebuild at the site and as a result the earliest evidence for a house at the site may either have been erased or buried at depth beneath the prominent platform on which the later house stood.

The identified anomalies indicate that the foundations of the latter phase of the house are in good condition and potentially well preserved as a result of the field remaining under pasture.

The results of the survey indicate the potential for further field evaluation.

 To re-visit the site and carryout further geophysical analysis of the area to the west and south in order to enhance the understanding of the garden layout and identify features that may predate the formation of the gardens and house.

# 8.0 Acknowledgments

A special thank you is due to the Dinedor Heritage Group for commissioning Herefordshire Archaeology to investigate and raise awareness of the historical and archaeological remains of the parish of Dinedor as a part of the Dinedor Origins Project.

Thank you to The Goodwin Family for granting access to their lands in order to carry out the field evaluation.

I would like to personally thank all of the members of the Dinedor Heritage Group and volunteers from across Herefordshire and beyond who expressed an interest and aided the field investigations.

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Rebecca Simmons

Melanie Butters

Tracey Goodwin

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# 9.0 Bibliography

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Geoplot Version 3.0, Bradford, West Yorkshire, Geoscan Research

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# 10.0 List of illustrations

# <u>Figures</u>

Figure 1: Location of evaluation area, Dinedor Parish, Herefordshire, UK. © Crown copyright. All rights reserved 100024168. (2013)

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Figure 7: Raw resistance data from across the site of Rotherwas House designated a scheduled ancient monument (HE548). © Crown Copyright, Geoplot Version 3.0 (2013)

Figure 8: Annotated resistance survey results for the Rotherwas House site, scheduled monument HE224. © Crown Copyright, Geoplot Version 3.0 (2013)

### Validation

Herefordshire Archaeology operates a validation system for its reports, to provide quality assurance and to comply with Best Value procedures.

This report has been checked for accuracy and clarity of statements of procedure and results.

Dr. K. Ray, MBE FSA MIFA

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# Appendix 1: Historic Mapping

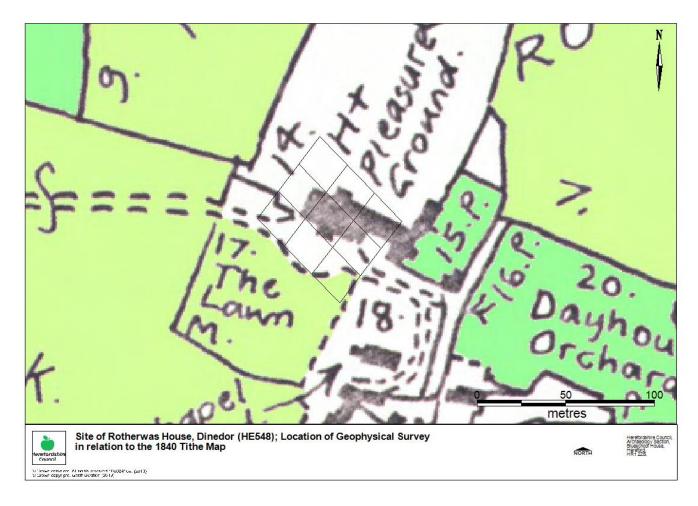


Figure 2: 1840 Tithe Map indicating the location of Rotherwas House and its associated gardens © Crown copyright Geoff Gwatkin (2013)

# Appendix 2: Resistance Survey Analysis

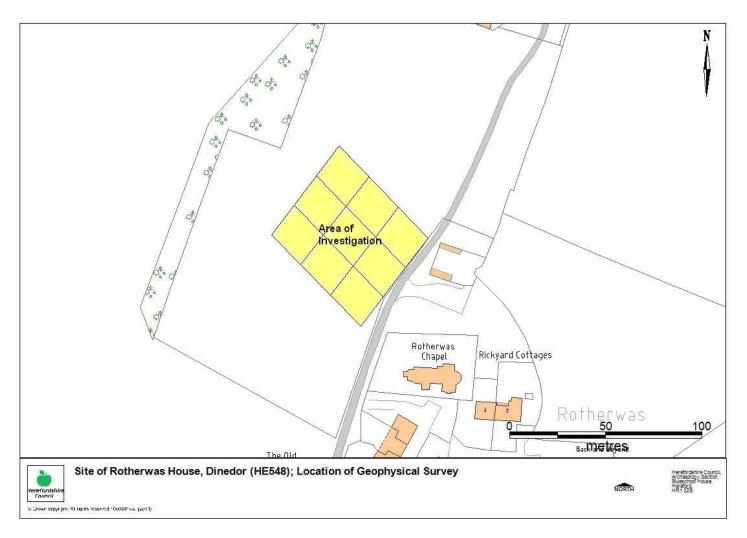


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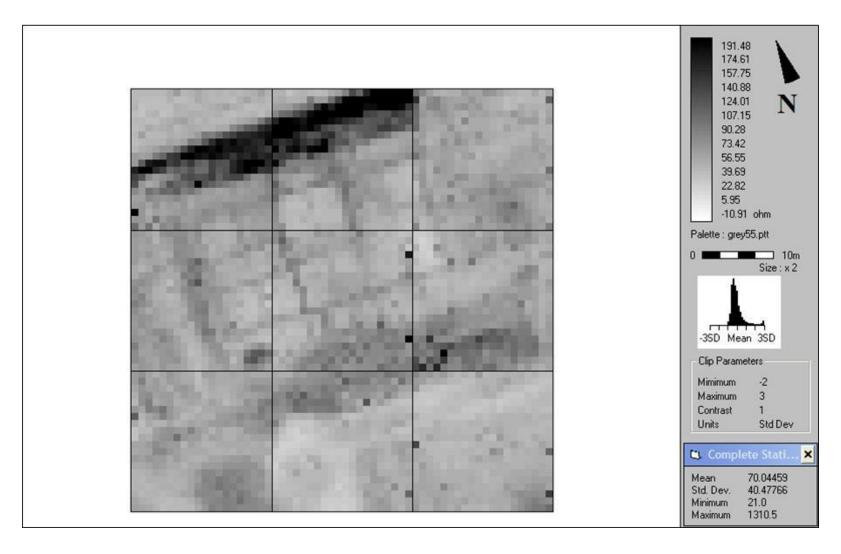


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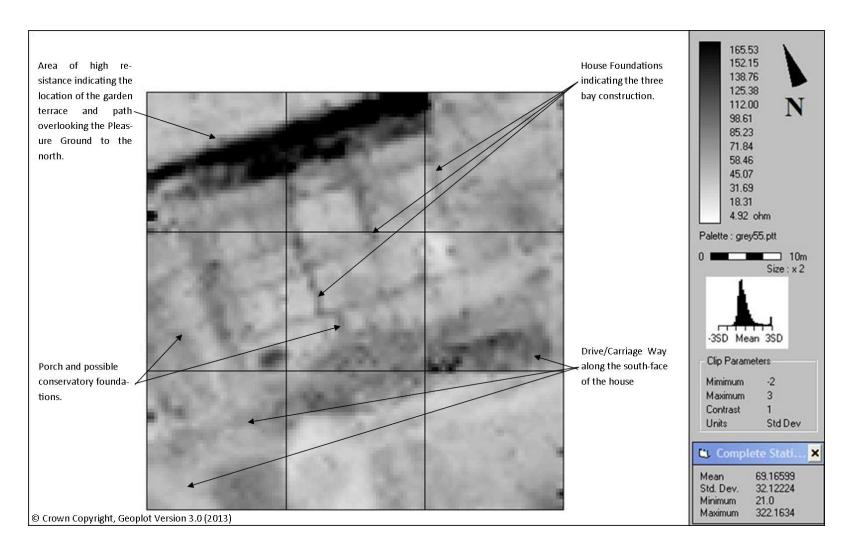


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