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**Torre Abbey, Torquay, Devon :  
Report on Geophysical Survey 2003**

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**Summary**

This resistivity survey carried out in the grounds of Torre Abbey produced a number of findings which are likely to relate to structures within the monastic precinct. Features detected by the survey include ranges of buildings which are likely to indicate a farmyard to the south of the surviving barn. Part of the site is currently a golf course, and detailed interpretation is hindered in places by high readings from the sandy bunkers, but additional wall footings appear to survive at several locations. Linear and rectilinear features can be seen, particularly to the south of the 18th century house (now the museum), which occupies the site of the abbey.

Other findings include an extended linear feature which could indicate a southern boundary to the monastic precinct, as well as structures which could relate to the monastic mill, as identified in previous investigations of the site. Other linear markings towards the east of the survey could indicate paths or drains, perhaps from more recent periods in the history of the site.

**Keywords**

Geophysical Survey

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# **TORRE ABBEY, TORQUAY, DEVON**

## **Report on Geophysical Survey 2003**

### **Abstract**

This resistivity survey carried out in the grounds of Torre Abbey produced a number of findings which are likely to relate to structures within the monastic precinct. Features detected by the survey include ranges of buildings which are likely to indicate a farmyard to the south of the surviving barn. Part of the site is currently a golf course, and detailed interpretation is hindered in places by high readings from the sandy bunkers, but additional wall footings appear to survive at several locations. Linear and rectilinear features can be seen, particularly to the south of the 18thC house (now the museum), which occupies the site of the abbey.

Other findings include an extended linear feature which could indicate a southern boundary to the monastic precinct, as well as structures which could relate to the monastic mill, as identified in previous investigations of the site. Other linear markings towards the east of the survey could indicate paths or drains, perhaps from more recent periods in the history of the site.

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## **Introduction**

The present house at Torre Abbey is an 18thC remodelling of one of the domestic ranges of the Premonstratensian abbey, which fell into ruin following the dissolution in 1539. The original plan of the abbey, founded in 1196 is unclear, but the church and cloister must lie to the north of the house, with perhaps other monastic buildings and a farmyard to the south. This area is now a lawn in front of the house, with an adjacent pitch and putt golf course.

It is noted in the project brief, as supplied by English Heritage, that the surviving gatehouse at the south east corner of the house could have provided access to a courtyard, with a southern range of buildings on the site of the golf course. An engraving of 1661 attributed to W. Hollar shows the buildings from the east, and indicates a double gabled building to the east and south east of the still-surviving barn. Parch marks have also been recorded which indicate the possibility of masonry remains to the south of the house. Other possible findings, as mentioned in the brief and quoted from Watkin (1912), include precinct walls, a fishpond, and remains of the abbey mill.

The site is a Scheduled Monument (Devon 171), and a geophysical survey to investigate the possible survival of evidence of these structures is needed for future management purposes. The survey was commissioned by the Archaeometry Branch of the English Heritage Centre for Archaeology, Portsmouth, and fieldwork for the survey was carried out on 18-19 March 2003.

## **Survey Procedure**

The survey covers an area of some 2.8ha taking in the lawn next to the south front of the house, and the whole of the adjacent pitch and putt golf course. This area was investigated by means of a resistivity survey, following standard fieldwork procedures as specified in the project brief.

Ground resistance measurements were taken using Geoscan RM15 resistivity meters with the twin electrode probe configuration and a mobile probe spacing on 0.5m. A Geoscan multiplexer was used to permit the collection of two readings at each survey station. The remote probes were placed at a sufficiently wide separation (10m +) to give readings of constant minimum value, and so avoid discontinuities between sections of the survey.

The survey grid was set out and located at the required national grid co-ordinates by means of a sub-1m accuracy GPS system. The survey was additionally tied in by measurements to buildings, as indicated on figure 5.

## Results

Various alternative representations of the resistivity data are shown in figures 1-4, with a summary interpretation on figure 5.

The significance of the graphical plot of the initial (unfiltered) data reproduced in figure 1 is mainly that it shows the extent of the interference from the bunkers of the pitch and putt course. These sandy mounds gave very high readings, usually with missing or over - range readings at the centre. These disturbances have been excluded as far as possible from the interpretation, but cannot be removed from the data plots.

Figure 1 also shows a number of positive linear anomalies of the kind which would be expected from buried wall footings. These can be seen more clearly in plan in the unfiltered grey scale plot (figure 2). It is clear from this plan that a number of linear features and rectilinear outlines have been detected.

Figure 3 shows the readings after filtering (with a high pass Gaussian convolution filter). This treatment emphasises narrower features and removes background trends. It therefore shows internal detail within some of the broad areas of high readings seen in figure 2.

A further copy of the same filtered plot is reproduced alongside an equivalent colour image (inset) on figure 4. Some of the possibly more significant findings are outlined or indicated on the grey scale copy. The stronger resistivity anomalies are indicated by red or green outlines. Weaker or discontinuous features are indicated schematically by single lines. Red outlines represent features which, on the basis of their plan or proximity to each other, could be interpreted as structures. Green outlines represent possible boundaries or garden features, although this distinction cannot be guaranteed.

This interpretation is reproduced separately from the data plot on figure 5, to which an indication of the parch marks has been added. These are traced approximately from a plan supplied to us by English Heritage.

One of the most clearly visible findings is the outline of a building to the south of the barn at A (as labelled on figure 5). There are further possible structures, or perhaps the remaining walls of a courtyard, at B and C. The outer limits of this enclosure are indicated by parch marks, but not the full plan of the structure at A.

Various features are indicated by the survey to the east of the barn in the approximate position of the building shown in the 1661 Hollar drawing. The plan of any structures detected in this part of the site is incomplete, but it is mentioned in the brief that Watkin dug to the south of the gatehouse in 1912. He discovered

foundations at a depth of 2 feet, which is probably about the limit of penetration for a resistivity survey with 0.5m probe spacing. A linear feature at G aligns with a parch mark, and could perhaps form part of quite a large building. Other structural remains may be present to the south, around F, but these correspond only in part to the parch marks. Smaller rectilinear features at D and E could well be buildings.

The linear resistivity anomalies H and J could perhaps be paths, boundaries or drains, and perhaps of more recent origin than the monastery. A linear feature L corresponds in part to a parch mark, and could also be a boundary or drain. A strong linear features at M does not appear to be part of a building. A parch mark at K was not detected by the survey.

## **Conclusions**

The survey has detected remains of several former buildings, and perhaps traces of others. The most clearly defined wall footings were detected to the south of the barn (features A-C), but others are likely to be present to the east of the barn, and south of the gatehouse (e.g., near G and F). Other smaller structures may lie further to the south (D and E). These are close to a possible boundary or channel marked by the east-west linear anomaly L, and near to a strong north - south linear feature, M. It would be interesting to know the location of the conduit described by Watkin in 1912. The features D, E and M could possibly be evidence for the abbey mill he mentioned.

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11 April 2003

P. Cottrell, D. Lewis and S. Brown carried out the fieldwork for this project.

**Reference**

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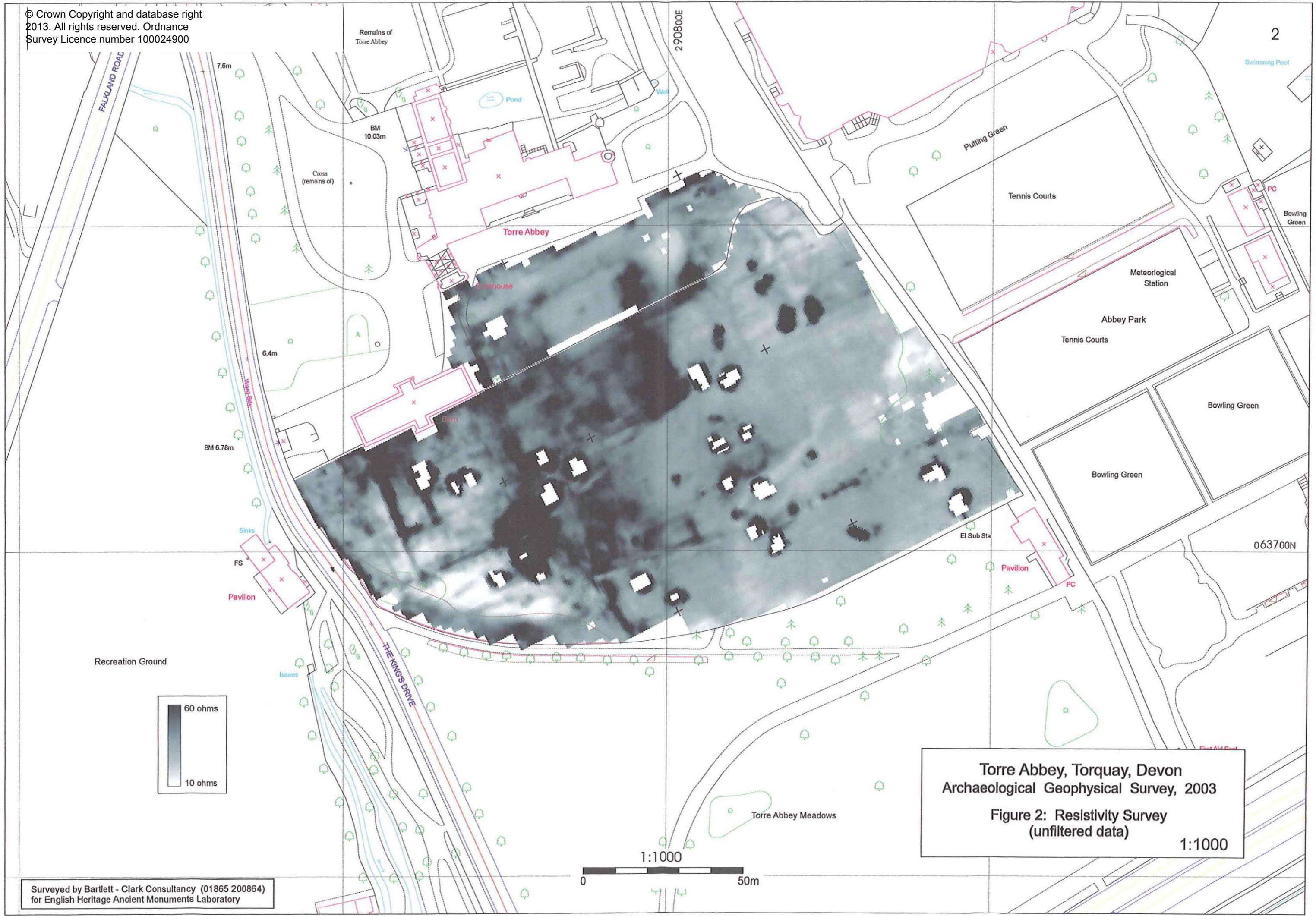
Watkin, H.R. 1912 *A short Description of Torre Abbey, Torquay, Devonshire 3<sup>rd</sup> edn.* (Torquay).

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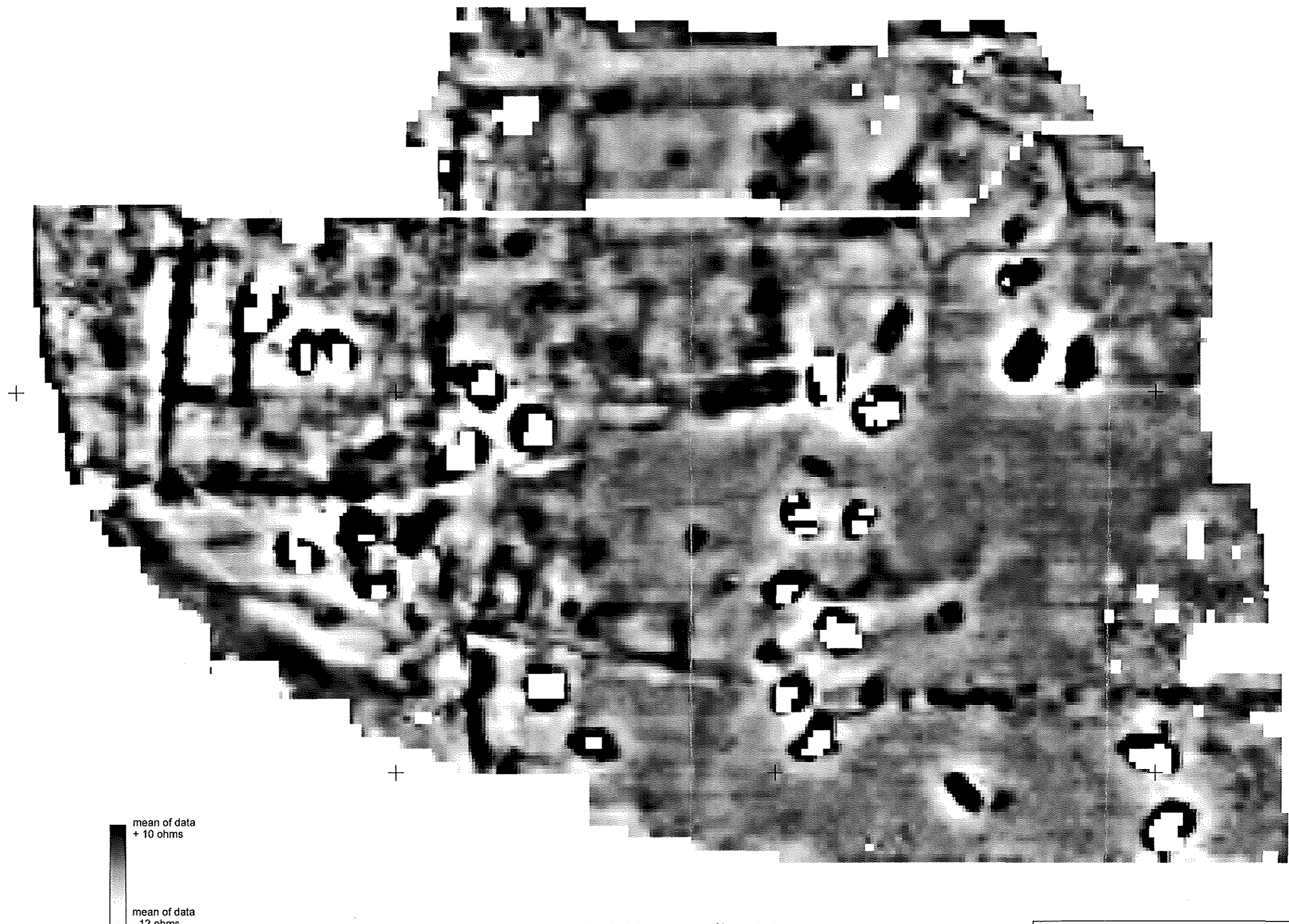


Surveyed by Bartlett - Clark Consultancy (01865 200864) for English Heritage Centre for Archaeology

Torre Abbey, Torquay, Devon  
Archaeological Geophysical Survey, 2003  
Figure 1: Resistivity Survey  
(unfiltered data)  
1:1000



Torre Abbey, Torquay, Devon  
Archaeological Geophysical Survey, 2003  
Figure 2: Resistivity Survey  
(unfiltered data) 1:1000



mean of data  
+ 10 ohms

mean of data  
- 12 ohms

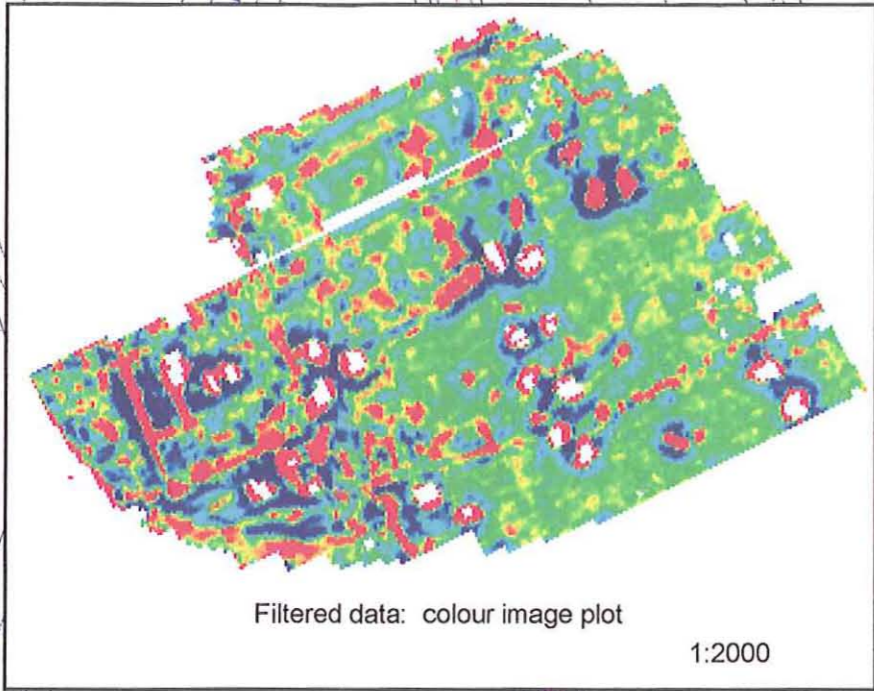
Resistivity survey: filtered plot

1:625

0 25m

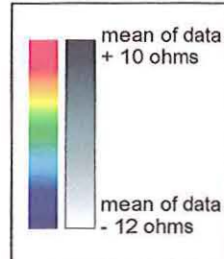
Torre Abbey, Torquay, Devon  
Archaeological Geophysical Survey, 2003

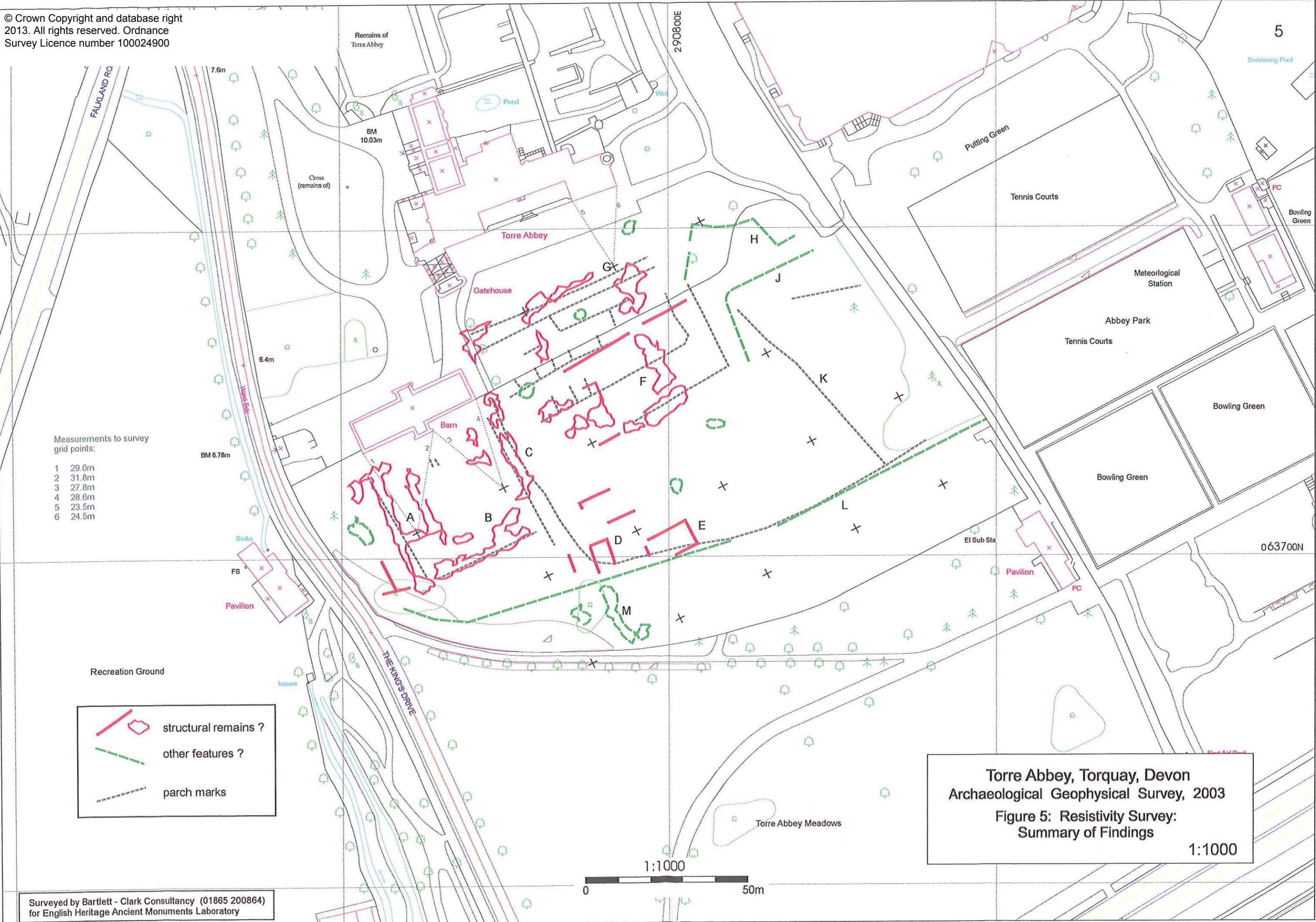
Figure 3: Resistivity Survey



— structural remains ?  
- - - other features ?

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**Archaeological Geophysical Survey, 2003**  
**Figure 4: Resistivity Survey**  
**(filtered data with interpretation)**  
**1:1000**





- Measurements to survey grid points:
- 1 29.0m
  - 2 31.8m
  - 3 27.8m
  - 4 28.6m
  - 5 23.5m
  - 6 24.5m

— structural remains ?  
— other features ?  
- - - parch marks

**Torre Abbey, Torquay, Devon**  
**Archaeological Geophysical Survey, 2003**  
**Figure 5: Resistivity Survey:**  
**Summary of Findings**  
 1:1000

