

A topographic survey of the Deserted Village of West Burton, Nottinghamshire.



NCA-004

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Contributors

The survey was undertaken by Andy Gaunt and Emily Gillott of Nottinghamshire County Council Archaeology.

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- EDF Energy
- Nottinghamshire County Council's "Building Better Communities" Scheme
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An Archaeological Survey Of West Burton Deserted Village

1. Introduction

All that remains of the village of West Burton, North Nottinghamshire, with the exception of three later farms spread across the parish, is a number of fields containing banks ditches platforms and holloways. The site also contains a graveyard, which was associated with a now demolished church. The site is a Scheduled Monument [No.29915], and concerns regarding the condition of the graveyard have led to a combined venture between English Heritage and Nottinghamshire County Council to secure the churchyard against erosion.

In advance of this work a topographic earthwork survey was undertaken of the earthworks of the deserted village. The work was carried out as part of the Nottinghamshire County Council's Building Better Communities Scheme, in partnership with EDF Energy and Groundwork Ashfield and Mansfield.

The survey, which took place over two seasons in October 2008 and 2009 was conducted to English Heritage level three survey specifications for earthwork survey using the techniques recommended, and the report was written to the standards and recommendations of both English Heritage (Ainsworth, et al. 2007) and the Institute of Field Archaeologists (IFA 1994).

Archaeological survey is promoted for Community Archaeology in 2007 publication *Understanding the Archaeology of Landscapes*, and season one was a great success as an example of public involvement in Archaeological field work. During the survey the site was visited by schools, history groups,

adults with learning disabilities, and the University of the Third Age. The Community Archaeologists and Maddie Holroyd from Groundworks, were able to accommodate trips around the site during the survey, as well as providing hands on opportunities to handle artifacts, and view sources of local history.

2. Site location, Geology and Topography.

The deserted village of West Burton lies in fields to the southeast of West Burton Power station at SK799854 (see figure 1). These fields are the property of EDF Energy. The village site lies on the western bank of a former meander in the Trent, known as Burton Round, and sits on the eastern end of an area of Pleistocene glacial till deposits. These deposits provide a raised vantage point overlooking the alluvium of the floodplain of the Trent to the east. The underlying bedrock is Mercia Mudstones of Permo-Triassic age (see figure 2).

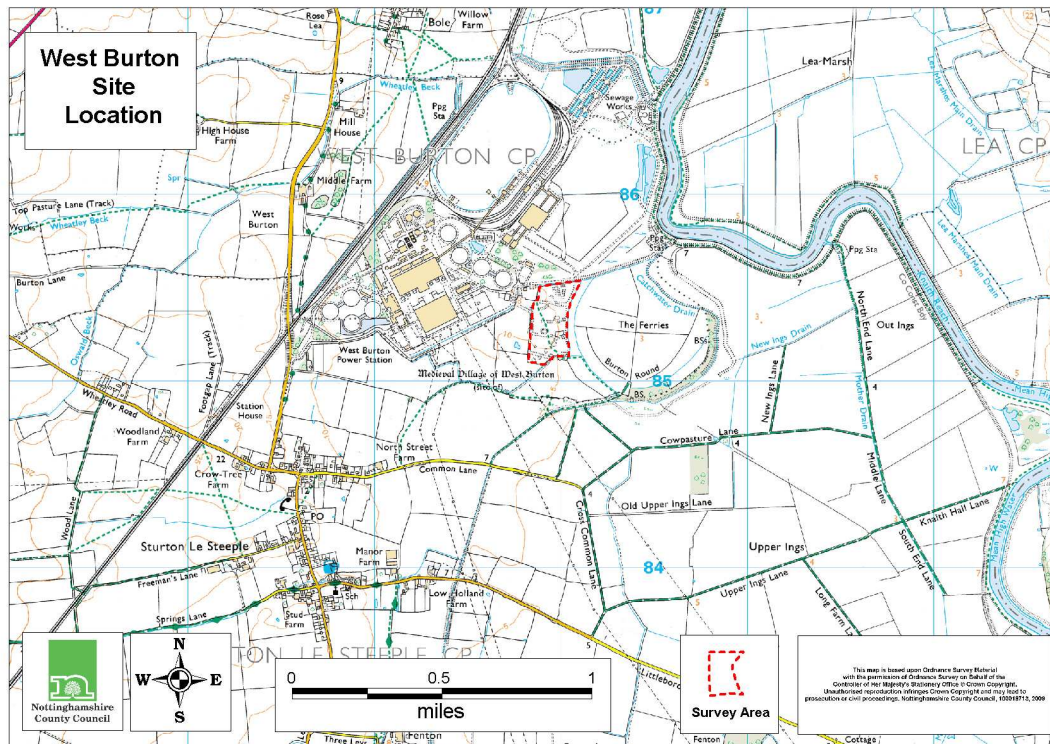


Figure 1: Survey Location on Ordnance Survey 1:25,000 Map

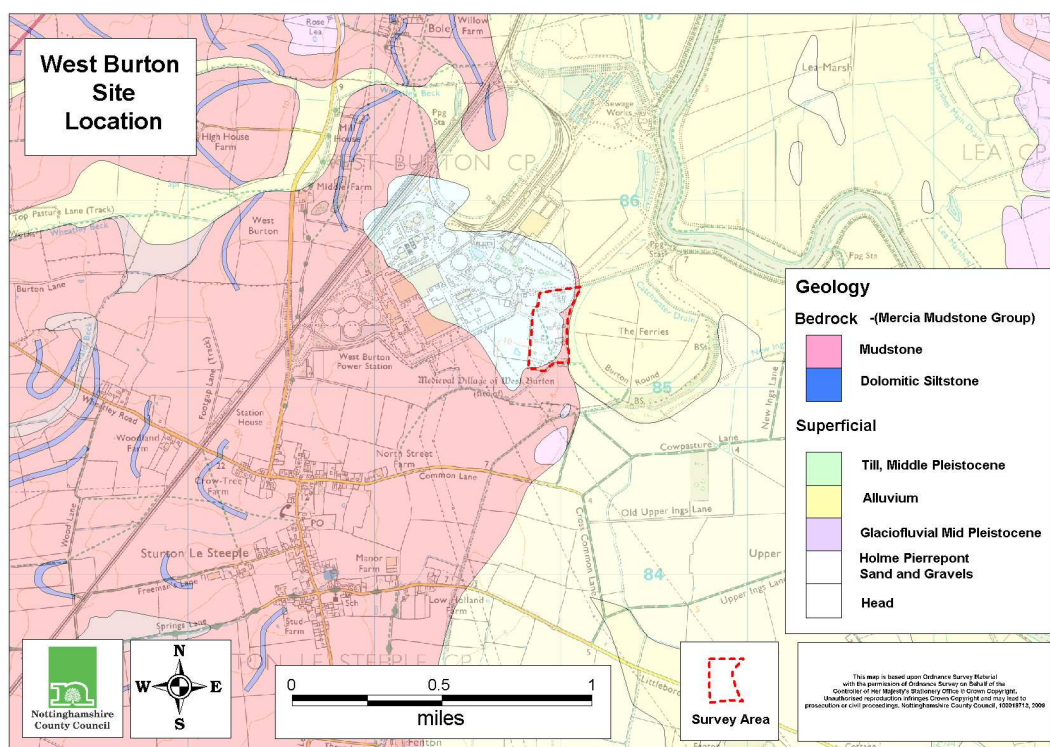


Figure 2: Geology of West Burton

3. Historical Background

According to the English Place Names Society, the name derivation for West Burton, comes from the old English *burhtun*, meaning fortified farm house (EPNS 1942). The village is first mentioned in 1086 in the Domesday Book, where the entry mentions; underwood 1 furlong long and 1 furlong wide, as well as the presence of a fishery for 200 eels. (Morris 1977).

The earthworks are often mistakenly referred to as a deserted medieval village, but the village survived until much later. It was not a victim of 15th century depopulating enclosures, still being a village of 15 houses and a church into the middle of the 18th century. The River Trent changed its course in 1797, and this began a decline in the village's fate, which combined with rack renting may have resulted in the abandonment of the site by the 1860s (Holland, D. 1967. TTS LXXI, pp70-71). The village church, dedicated to St. Helen (Throsby 1796, reprinted 1972) was demolished in 1886, when a faculty was granted for the purpose. (Holland, D. 1967). The village therefore offers a rare example of a link between the medieval and the modern village, presenting an exceptional opportunity to study the remains of a village fossilized in the 18th century.

3.1. The 1750 Fairbank Map

A map of the site was produced in 1750 by Sheffield surveyors the Fairbanks, and shows buildings, earthworks and field boundaries, along with the names of the occupiers and tenants. On the eastern side, the map depicts the River Trent curving through the meander of Burton Round. By 1750 the main street runs perpendicular to the river, with single and double story buildings on either side. The map also shows a number of yard and field boundaries, an orchard,

gardens, and possibly the village pinfold. This street appears to be the nucleus of the village at this time. To the south of this street at some distance stands the village church, which has one range of windows along the nave, and a small bell tower. To the west of this, a large farm house with a range of out-buildings occupies a prominent position.



PLATE 5 West Burton village in 1750. (Fairbank Collection, Sheffield City Library).

HOLLAND, DESERTED VILLAGE OF WEST BURTON

Figure 3: West Burton vaillage in 1750. (Fairbank Collection, Sheffield Local Studies Library

4 Aims and Purposes of the evaluation

- To establish the overall shape and nature of the earthworks, resulting in a hachure plan of recorded features.
- The recording of X, Y, Z coordinates of points across the site, to enable creation of a Digital Elevation Model (DEM) to study the earthwork in 3D, and to analyse its setting in the wider landscape, through 3D analysis.
- To attempt a relative dating of features as recorded in the field, and to help in interpretation of the earthworks.
- To be used to inform future site management, by measuring the condition of the earthwork, and indicating its local historical importance.
- The project was also conceived as an opportunity for public involvement in Archaeology.

5. Methodology

5.1 Equipment

The survey was undertaken using survey grade Global Positioning System (GPS) and an Electronic Distance Measuring (EDM) Total Station. The GPS system used was a Leica GPS900 enabled to use Smartnet technology. This GPS system operates using Differential GPS (DGPS), where corrections are given to errors in the satellite location data received by communicating with remote stations. This Smartnet system, corrects the rover station, allowing points to be recorded 'on the fly' to sub-centimetre accuracy

levels, via a mobile telephone connection. The GPS rover was set to record either continuously or to take static points, depending on requirements as recommended in Ainsworth, S. & Thomason, B. 2003.

EDM Total Station combines a Theodolite to record vertical and horizontal angles, and an Electronic distance measurement device, to enable the acquisition of 3-Dimensional coordinate data. Total stations work by reflecting infra red laser against a prism. The Total Station requires two operators, one to operate the device and the other to position the prism pole in the required location for surveying. EDM total stations also provide sub-centimetre relative accuracy for recordings (<http://totalstation.org/total-station-functionality.php>). The Total Station used in this survey was a Leica TCR805.

5.2 Control of Survey

‘Control is the accurate framework of carefully measured points within which the rest of the survey is fitted’ (Ainsworth, et al. 2007). Section 2.1 Control of Survey in *Metric Survey Specifications for English Heritage* (Lutton. 2003) states that metric survey ‘must provide reliable and repeatable control capable of generating the required coordinates within the tolerances stated’. The prescribed tolerance level is to a precision of $\pm 10\text{mm}$ (Lutton. 2003). This level of control was achieved by using Real-time Kinematic DGPS rovers; set to take readings within $\pm 10\text{mm}$ accuracy levels, to stake-out station points which provided inter-visibility across the site for optical survey using EDM Total Stations. Total stations were set up above these station points when required and orientated by the other survey control points to provide control between GPS and optical survey. As well as falling within the accepted tolerance levels, this technique also fulfills the requirement that the control must be repeatable. The use of Kinematic DGPS to stake-out the control points means that the survey area can be re-occupied easily in the future using technology of the same specification or higher, without the need to leave permanent markers onsite.

5.3 Topographic Survey Methodology

The survey was undertaken using a combination of objective and subjective survey techniques.

5.3.1 Objective survey

The objective, systematic part of the survey was carried out using the Real-time Kinematic DGPS systems described above. 2m transects were surveyed across the site at right angles to the edges of the survey areas. Transects were controlled using tape measures and ranging-poles for guidance. Surveyors walked these transects, and recordings were automatically taken every 0.5 metres. Where tree cover prevented GPS recordings within the prescribed tolerance levels, EDM Total Stations were set up and used to take readings. This method fits in with English Heritage suggestions for interchanging between GPS and EDM survey (Ainsworth, S. & Thomason, B. 2003). EDM survey was employed where GPS signal was not sufficient, for general topographic readings, as part of the systematic survey process.

5.3.2 Subjective survey

Subjective survey was used as a means to record features in more detail. It relies on the expertise of the surveyor to analyse the earthworks and to record them. For this procedure, EDM Total Stations were used to record the tops and bottoms of slopes. These recordings were highlighted in the survey data using the feature code facility available in total stations. This subjective survey method was employed in order to allow a hachure plan of the site to be created as recommended by English Heritage (Bowden 2006). This was then used for interpretation.

5.4 Data preparation and analysis.

All data was processed in Mapinfo Geographic Information Systems (GIS). Vertical Mapper 3.0: *Spatial Analysis and Display software*, a

Mapinfo software extension was used to create a nearest neighbour interpolation model to present the site in 3D. This Digital Elevation Model (DEM) was then subject to slope surface analysis, which measures and displays relative slope severity. In order to interpret the 3-Dimensional earthworks in a 2-Dimensional map, the data has been plotted using a combination of objective contouring, and subjective hachure plans, as recommended by English Heritage. This plan produced in MapInfo and Vertical Mapper software, and was drawn to English Heritage conventions (Ainsworth et al 2007. pp14-19). Vertical Mapper was also used to combine survey data with Ordnance Survey digital Terrain Models to study the village in its wider landscape context.

6. Results

6.1 Hachure Plan

The results of the survey are displayed in the hachure plan in figure 4. The hachure plan represents the subjective part of the survey, by depicting slopes and breaks of slope using hachures, and the objective survey through the use of contours. The area surveyed is 450m north to south, and 250m east to west at its greatest extent. The highest area is at 10.5m ODN (Ordnance Datum Newlyn) on the western side of the survey area. The site slopes gently to the east before ending abruptly in river cut cliffs. These fall steeply from approximately 6m ODN to the former meander. The site also slopes towards the south. In the southern half of the area the ground falls from 9.5m to 4.5 in the south eastern corner, which forms the lowest part of the surveyed area. There are no cliffs in the south east or north eastern corners of the area. The cliffs form the outermost edge of the former meander, where erosion would have been greatest. The site is cut by three major linear hollows running west to east. Each of these is more deeply incised to the east, as they

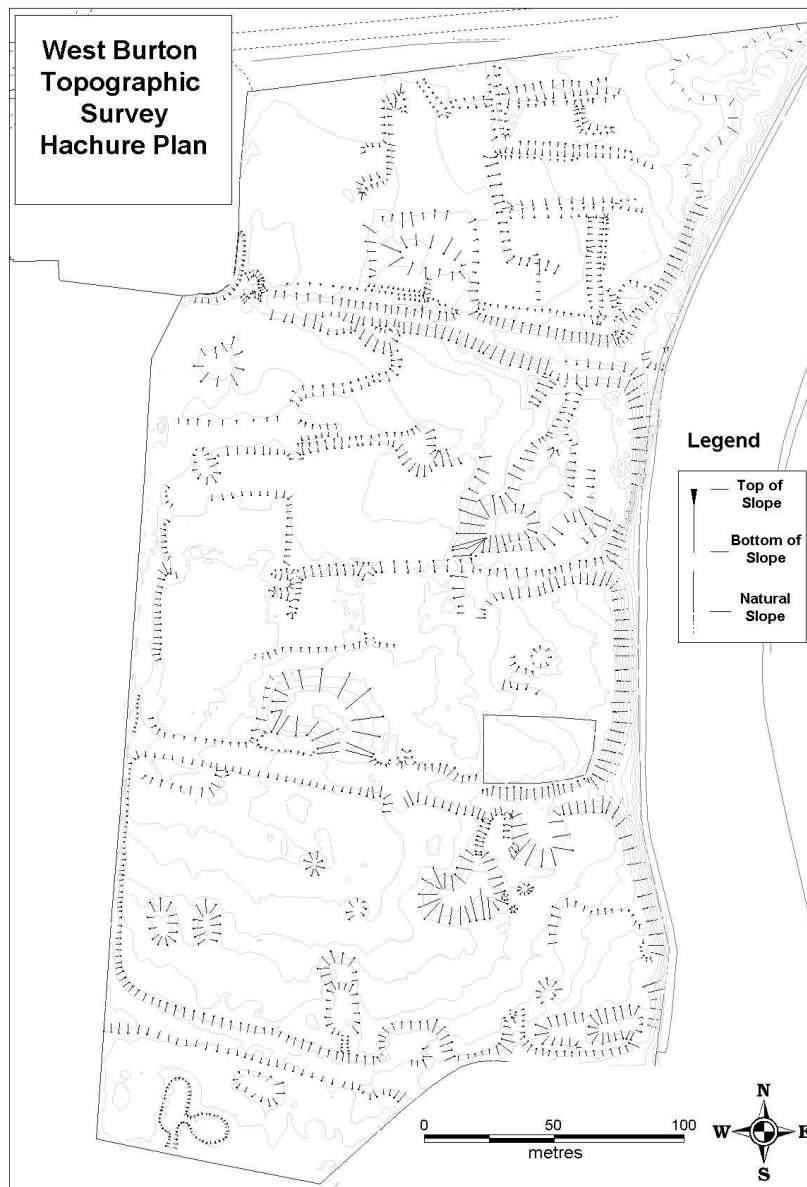
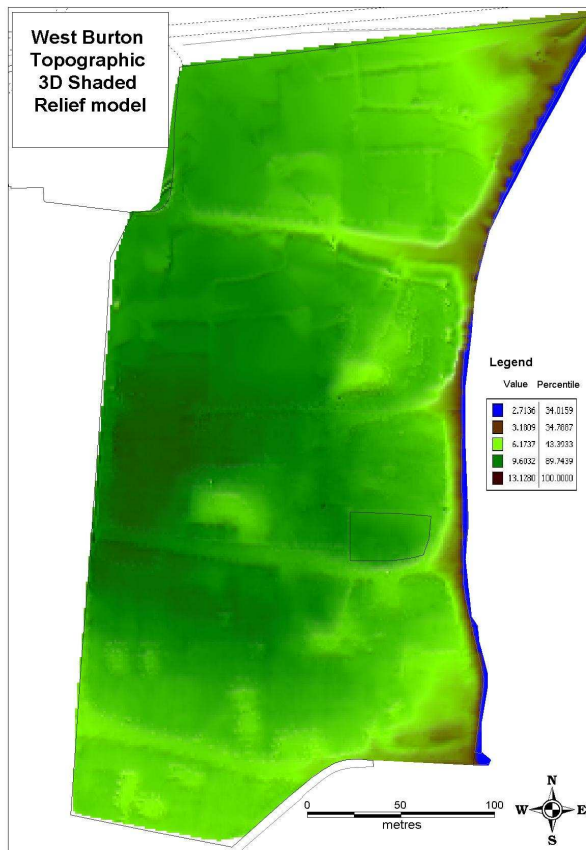


Figure 4: West Burton Survey Hachure Plan.

approach the former waters edge. There are a number of platforms, ditches, banks and hollows across the site. With two large deep areas of possible extraction in the central area. Two of the three east-west holloways cut through the cliffs to meet the former river, with their sides widening out

to create a river front terrace, providing lower level access to the river front. The third holloway to the south of the site, is truncated by a later watercourse, and ends before meeting the old river. Earthworks in an adjacent field may form the southern bank of this, just outside the survey area. A smaller fourth holloway extends 60 metres back from the former waterfront to the north of the church yard. The western edge of the site is marked by a hedgerow, this runs in the bottom of a holloway running north to south. This holloway connects the three holloways running west to east.

6.2 3D Analysis



The 3D results were used to create a DEM which was subject to a number of forms of analysis. The image shown in figure 5 is a shaded relief model of the site. This 2D method of modeling the DEM highlights the banks and ditches within the survey area well, including the main holloways, and boundary ditches. The cliffs at the rivers edge are well defined, with the colour change from the high ground in green, to the low ground in brown. The blue

water line was produced by recording the water level in the drainage channel as of October 2008. The 3D representation in figure 6 below is produced by draping the shaded relief model over the DEM. This method is perhaps the most realistic and easily understood method of displaying the results.

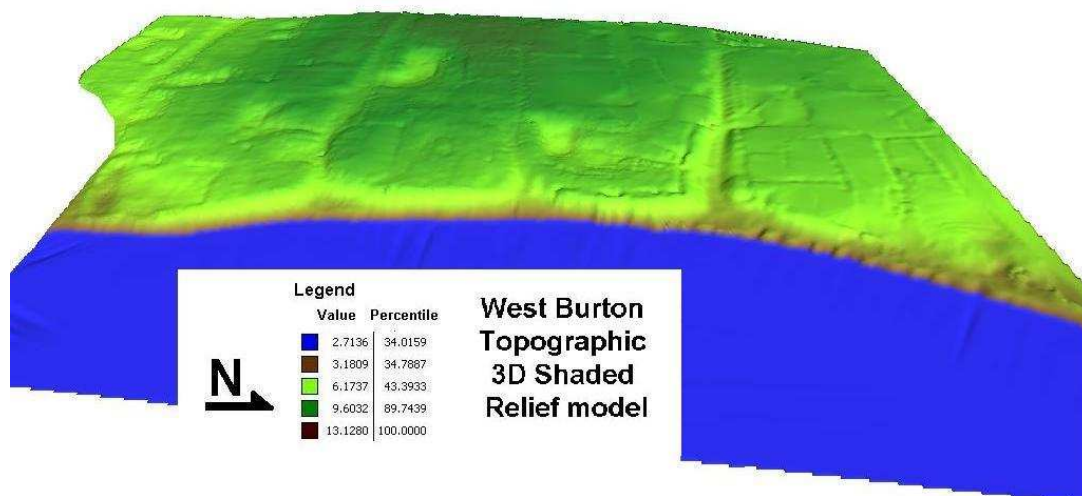


Figure 6: Shaded Relief Model of West Burton village, viewed from the East.

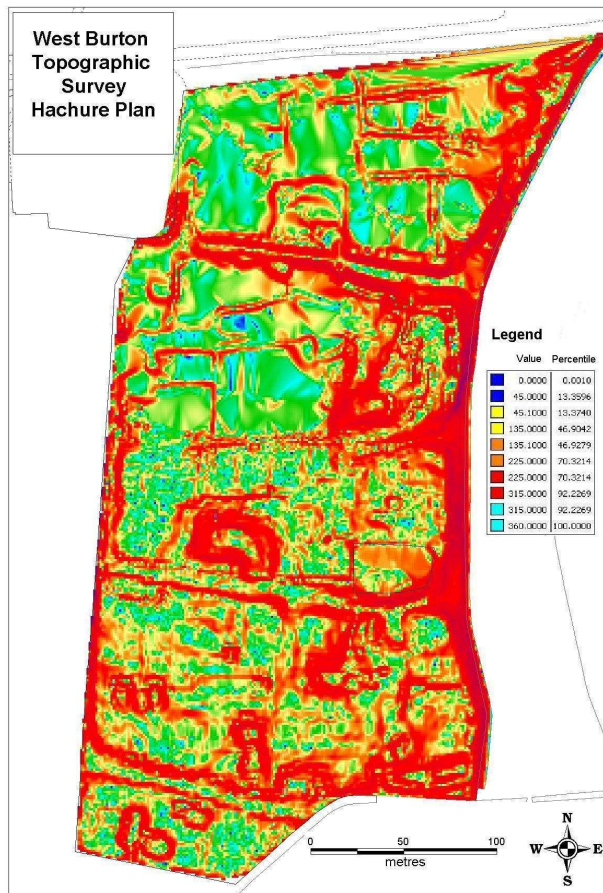


Figure 7: Surface Slope Analysis Raster Image

Section 6.1, are also very well represented. Figure 8 below shows the slope raster draped over the DEM. This 3D image helps to further accentuate the features in the survey, as the colour contrast highlights the areas of high slope associated with the earthworks, against the relatively flat areas in between.

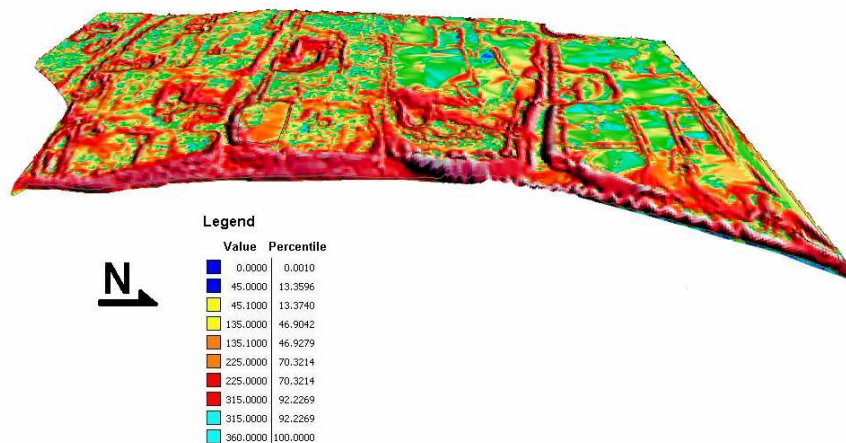


Figure 8: Slope analysis raster image draped over digital elevation model

Slope analysis of the DEM produced dramatic results. The results represent well all the features discussed and represented by the hachure plan in section 6.1. The holloways are again well defined, as well as a large circular depression just to the south of the centre of the area. The rectilinear enclosures to the north east of the site are very prominent, as are the earthworks adjacent to the northern edge of the northern holloway. The circular depressions in the south of the study area, as discussed in

6.3 Landscape Context

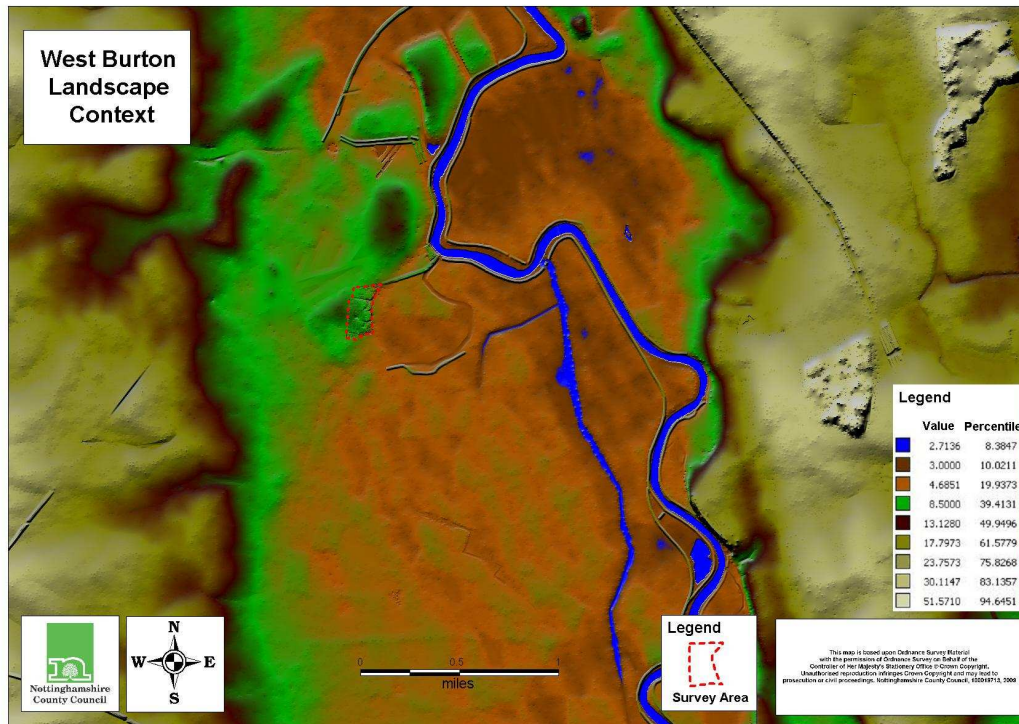


Figure 9: West Burton landscape context

Figure 9 above shows the site in its wider landscape context. The image was created by colour ramping the 3D DEM to help highlight changes in the topography of the landscape. The River Trent shown in blue meanders through its flood plain. The floodplain, highlighted in brown is flanked by raised glacial and gravel deposits to the east and west marked by a change in elevation shown in green. The raised deposits which form the area of the former village, and the area surveyed are shown within a dashed red line. These deposits are of Pleistocene age, and are not part of the flood plain. The palaeochannel of Burton Round is faintly visible to the west of the river, and the east of the survey area in the centre of the image. To the east and west the dark brown colours through to cream and beige represent the higher ground of the Mercia Mudstones, which form the bedrock of the area. The site therefore enjoys an elevated position, relatively safe from flooding, which command views east and west across the floodplain and for many miles up and down the valley to the north and south. It is surrounded by the fertile land of the floodplain for agriculture, as well as having a riverside location. This is an ideal site for a village and also for a fortified farmstead, as the name derivation suggests was the settlements original function. A mile to the south

is the Roman road which linked Lincoln to Doncaster. This road crossed the Trent at Segelocum, at modern day Littleborough. The name Littleborough is also derived from a fortification. It is interesting to note that across the river an 'east' Burton exists in the village of Gate Burton. Gate Burton is less than a mile north of the roman road on the east bank of the Trent in Lincolnshire. The name means fortified farmstead by the street, from the old Scandinavian word gata. Gate Burton is 2.5 miles to the south east of West Burton. The river crossing and road would have been prominent communication routes during the post Roman era, when the site was potentially occupied.

The water levels for the River Trent in figure 9 above are estimated by fitting the river within its channel in the DEM. The height for the water in figure 9 is therefore at 2.7m ODN. The image in figure 10 below is an attempt to demonstrate the elevated nature of the settlement location. A 2.5m or 8'2" rise in water levels across the entire floodplain, would fail to flood the site, with water only entering the entrances of the holloways, and perhaps flooding the lower ends of the village streets. Most of the buildings are situated on the raised ground above the holloways, and therefore for the site to flood entirely levels would have to rise enough to breach the cliffs which are 6 metres above sea level.

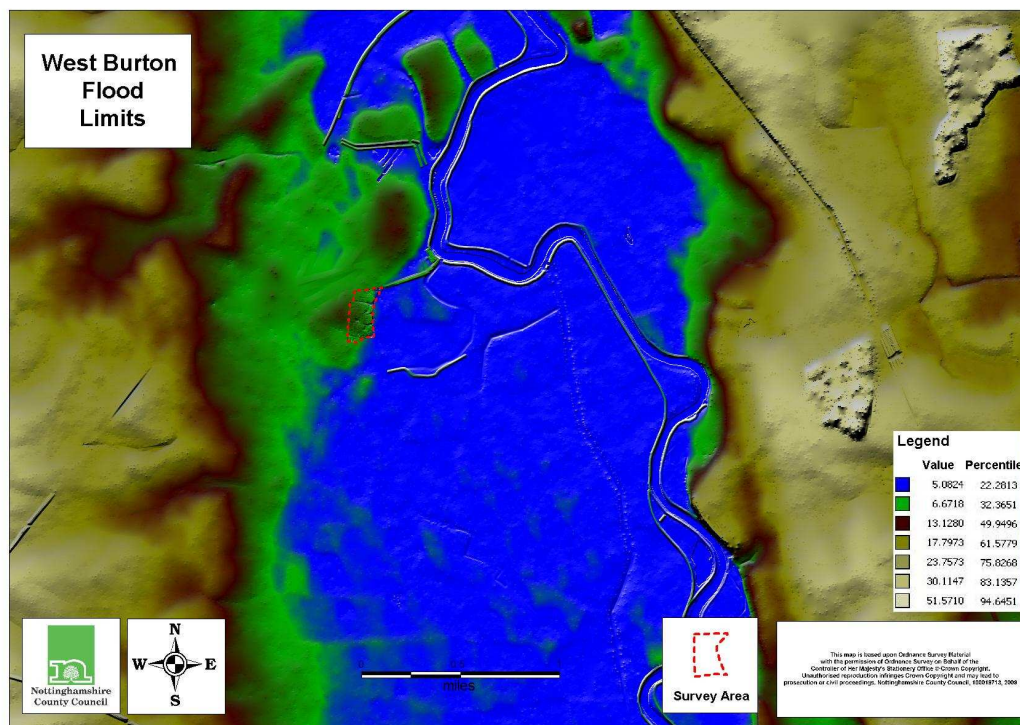


Figure 10: West Burton village and flooding.

7. Conclusions

It is important that earthwork survey not only includes results, but also interpretation (Ainsworth et al. 2007 p14). The following is an attempt to interpret the extant earthworks of the site surveyed. The main methods employed, are based on a combination of map regression and field based observations. The interpretation is presented with features extracted from the various available maps, accompanied by relevant discussions. The interpretations therefore follow the chronology of the maps, and then look back to interpret possible earlier features. An overall composite map displays the phasing together, towards the end of the section, and earthworks not allocated any chronological phasing are discussed at that point.

The earliest available map of the village is the 1750 Fairbank map, as previously discussed. To enable interpretation of the earthworks from the 1750 map, the map was digitally scanned and was georeferenced using ER Mapper software. This process applies geographical coordinates to the scanned image. The georeferenced image could then be imported into the GIS database and overlain on the survey data. When this was done, the features were traced from the image to create a vector layer of lines to represent the features (see figure 12). Figure 14 shows the results of this process with the vector line data overlain on the hachure plan. By doing this the extant earthworks recorded by the survey can be directly compared with those in the map. The outcome from this process is shown in figure 15, and discussed below. A similar process was used in the map regression study carried out for the other periods. It should be noted that the conclusions date the features from map regression; a feature on the 18th century map could be from an earlier time.

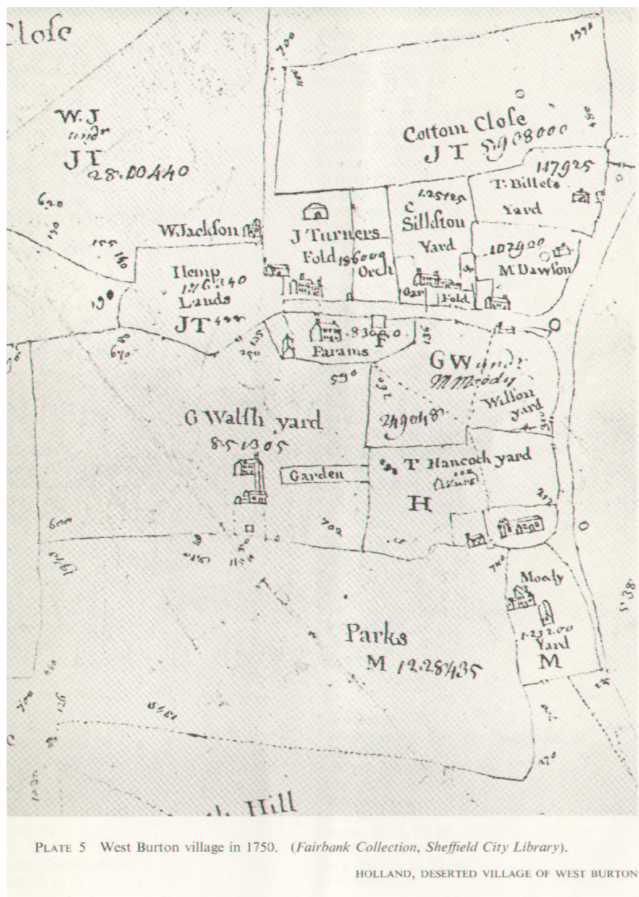


Figure 11: West Burton in 1750.

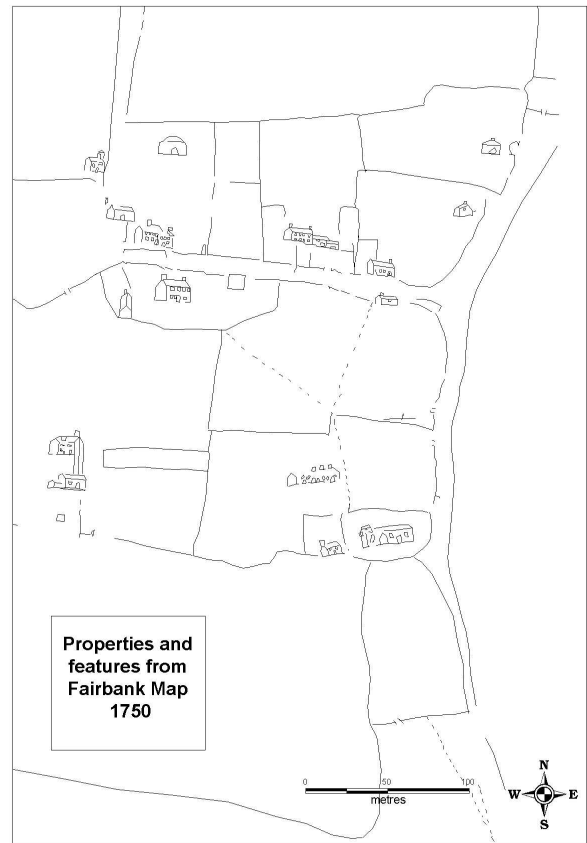


Figure 12: Features extracted from 1750 map.



Figure 13: West Burton hachure plan.

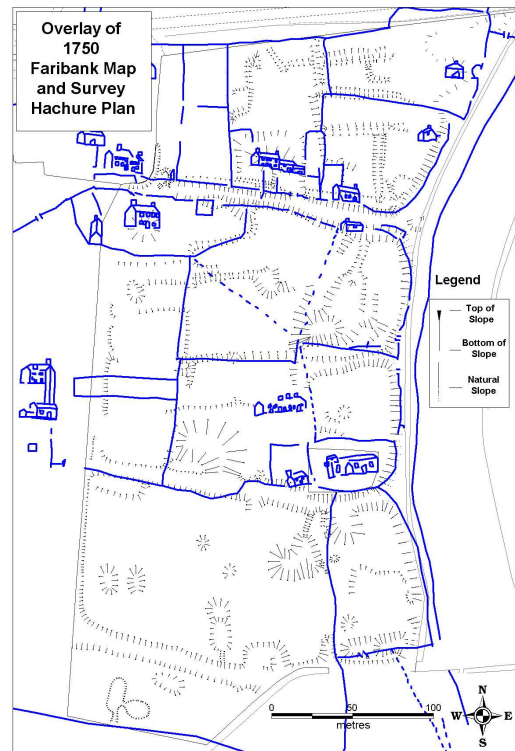


Figure 14: Hachure plan with 1750 features overlain

7.1. Eighteenth century features.

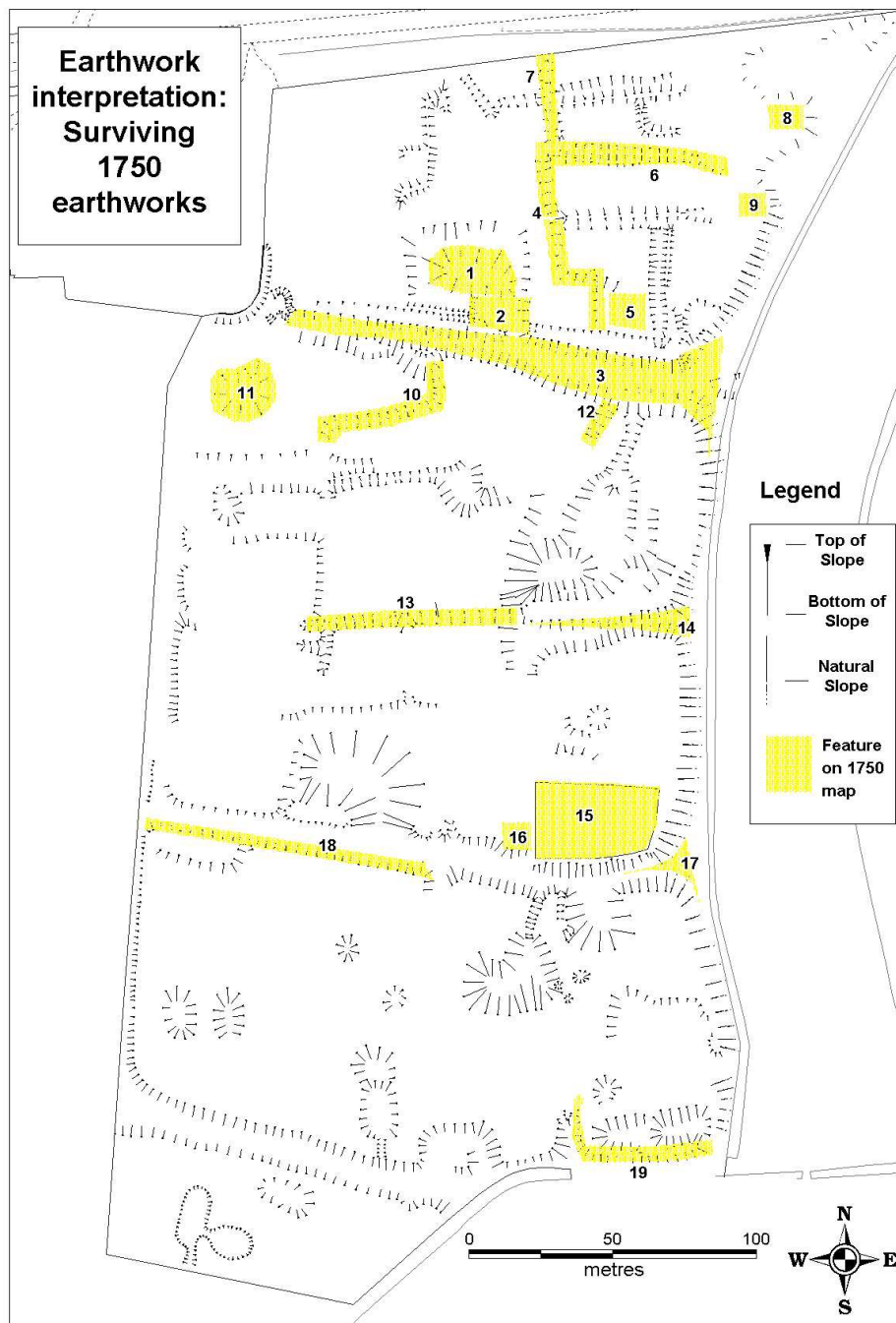


Figure 15: Surviving 18th century earthworks over survey hachure plan

Feature

1. House Platform
2. Fold
3. Holloway
4. boundary ditch
5. House Platform
6. Boundary ditch and bank
7. Boundary ditch
8. House Platform
9. House Platform
10. Boundary ditch
11. Hollow-possible robbed out house foundations
12. Holloway
13. Boundary ditch
14. Holloway
15. Churchyard
16. Possible House Platform
17. Holloway
18. Edge of Holloway (land boundary)
19. Bank field boundary

The focus of the village by 1750 is to the north around the northernmost holloway. The features identified on the ground which are shown on the map are depicted in yellow in figure 15. The holloway which forms the village street is the largest of the three main holloways that cross the site. It is more deeply incised than the others, which suggests they had reduced in, or gone out of use by this time. Feature 1 is a large oval raised platform which appears to be linked to a property on the map, which consists of a farm house and a number of external extension buildings. The platform sits in a square depression which is similar in shape to a garden labeled on the map to the left of the building. To the front right of the building is a square depression which seems to align with a square enclosure on the map labeled 'fold'. The location of this fold on the main street of the village, suggests that this may have been the location of the village pinfold. When animals wandered from common land onto the communal arable open fields of a village, they were rounded up by an elected official known as the Pinder. They were then placed in the Pinfold, and the owner had to pay a fine to retrieve the captive animal. This practice extended back through the medieval period, which suggests that this feature is older than the 18th century. Feature 3 is the village main street discussed above. Other prominent features include the ditches 4, 6, and 7, which form the boundaries of Dawson and Billets yard. A Thomas Billet who died in his nineties in the late 18th century is located in the churchyard of the neighbouring parish of Stirton le Steeple. Features 5, 8 and 9 are the remains of buildings. Feature 5 is a flat area surrounded by ditches, features 8 and 9 area also flat areas, but here demolition material of bricks and tile can be seen in the soil. Feature 10 is a boundary ditch which encloses an area shown as 'Farams' on the 1750 map. The depression shown as feature 11 probably relates to the robbed out foundations of the building within this enclosure. Feature 12 is a small holloway or ditch that may be associated with the dashed line on the Fairbank map. Feature 13 relates to a boundary which by 1750 was part of a large enclosure. Feature 14 is the entrance to the short holloway shown on the hachure plan, showing the holloway to have existed as a feature at this time. Feature 15 is the church and surviving churchyard, and feature 16 is a small flat area, possibly associated with the small cottage shown outside the western end of the churchyard. The southerly

holloway is shown on the map as an inlet, similar to the short holloway mentioned previously. This is shown as feature 17. The holloway seems to have been used as a boundary marker, with its southern edge forming the northern boundary of the Parks area to the south. In the south west corner feature 19 is a curving sloped feature which may relate to the boundary of 'Moaty Yard' in 1750. The features discussed are those extant earthworks that were present when the village was surveyed in 1750. They are therefore at least 18th century in origin, although many will be older, and some of the enclosures boundaries and platforms will be from preceding periods.

7.2 Nineteenth Century Features.

A number of the recorded earthworks which are not depicted on the 1750 Fairbank map can be identified from 19th century maps of the village. Two important features identified from comparison of survey data and historic mapping are the quarter-circle ditch to the southwest of Low farm (feature 1 in figure 19, and the large depression to the south of the centre of the survey area (feature 2 in figure 19). Feature 1 has been identified as a Ha Ha; *a dry ditch or sunken fence which divided the formal garden from the landscaped park without interrupting the view* (English Heritage 1999). It is presumed here that it is contemporary with the building of Low Farm between 1851 and 1865 (Holland, D. 1967).

The hollow labeled feature 2 in figure 19, appears on the first edition 6 inches to 1 mile map of 1892, shown in figure 16 above. The absence of the feature from the 1750 map may be due to it not being recorded by the surveyors. The map was interested in land parcels, ownership and tenancy arrangements, and may have ignored such a feature. However it is possible, and even likely, that the depression did not exist in 1750, and represents a phase of extraction activity between 1750 and 1892. The location of the hollow adjacent to one of the main holloways of the village could indicate that it was dug out of the former location of a house which was robbed out prior to

1750. The extracted hollow is shown as holding water on the 1892 map, and was probably used as a pond for livestock once the village was deserted.

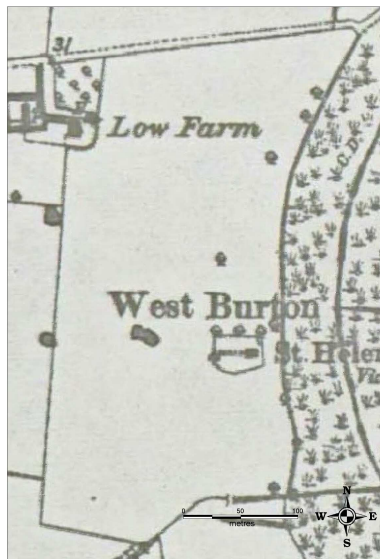


Figure 16: 6 Inches to 1 mile, 1st edition Ordnance Survey map, 1892.

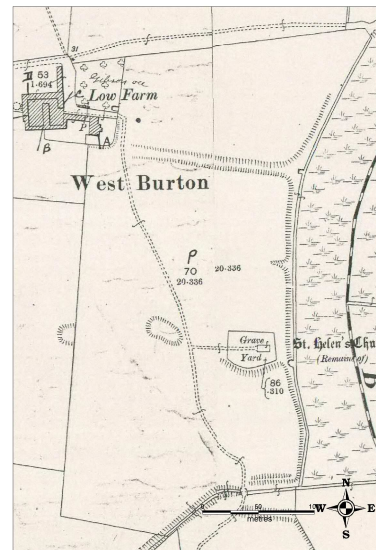


Figure 17: 25 inches to 1 mile, 2nd edition Ordnance Survey map, 1899.

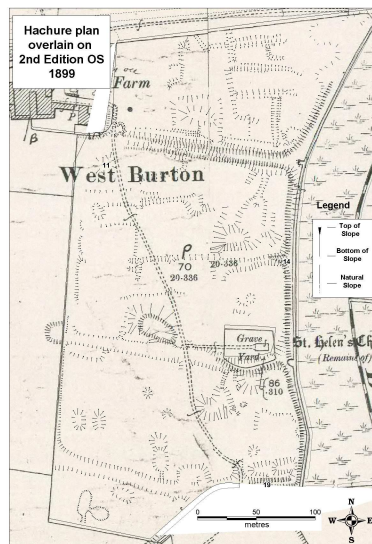


Figure 18: Hachure Plan overlain 1899 2nd Edition OS map

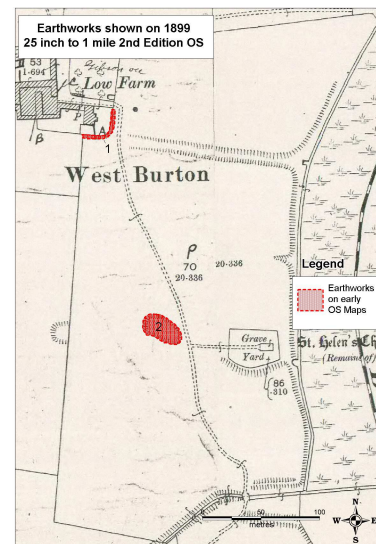


Figure 19: Earthworks on 1899 2nd Edition OS map

7.3. Possible 20th century earthworks.

A large depression to the east of the centre of the surveyed area extends up to 55m east to west, by 45m north to south. At its deepest point it is 6m ODN, which makes it up to 4m deep. It is assumed here through a process of elimination that the hollow is the result of 20th century extraction, as it is not depicted on earlier maps. The hollow appears to have been extracted in a number of phases, with a number of different levels being present in the feature. Feature number two in figure 20 is situated in the south west corner of the area. The earthworks consist of two co-joined sub-circular depressions, set at right angles and connected by a small channel. The edges of the feature are steeply angled, and show little evidence of erosion. The base of the feature is very rough and disturbed by cattle, and the grasses within are very coarse and tussocky, suggesting the hollows often hold water. It is concluded here that these are modern ponds extracted for use by livestock.

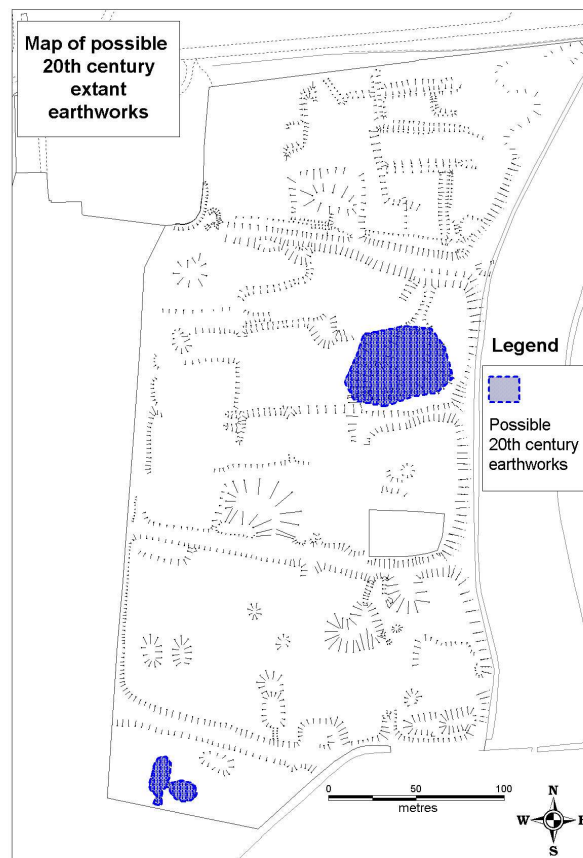


Figure 20: Possible 20th century features.

7.4. Medieval features

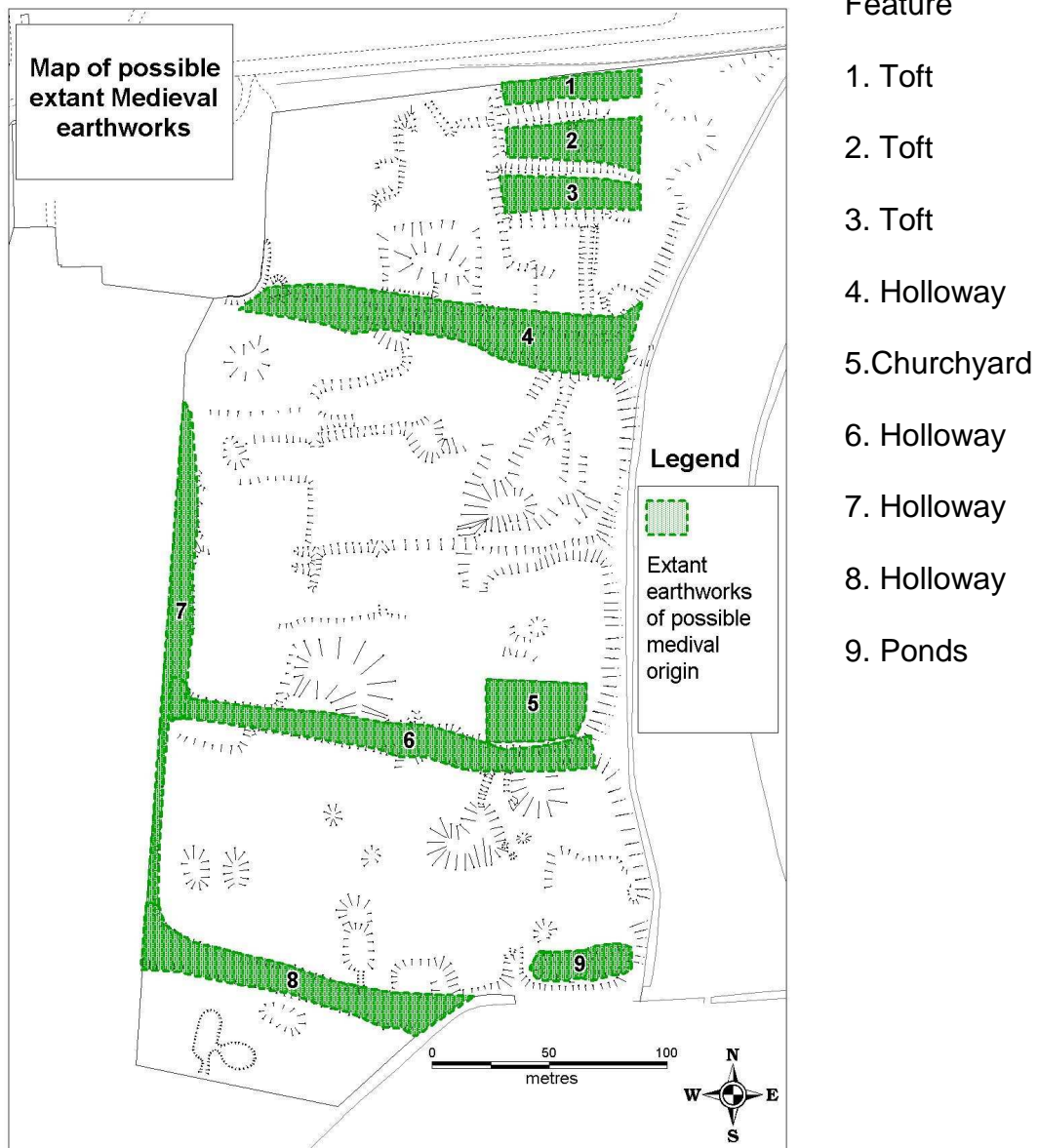


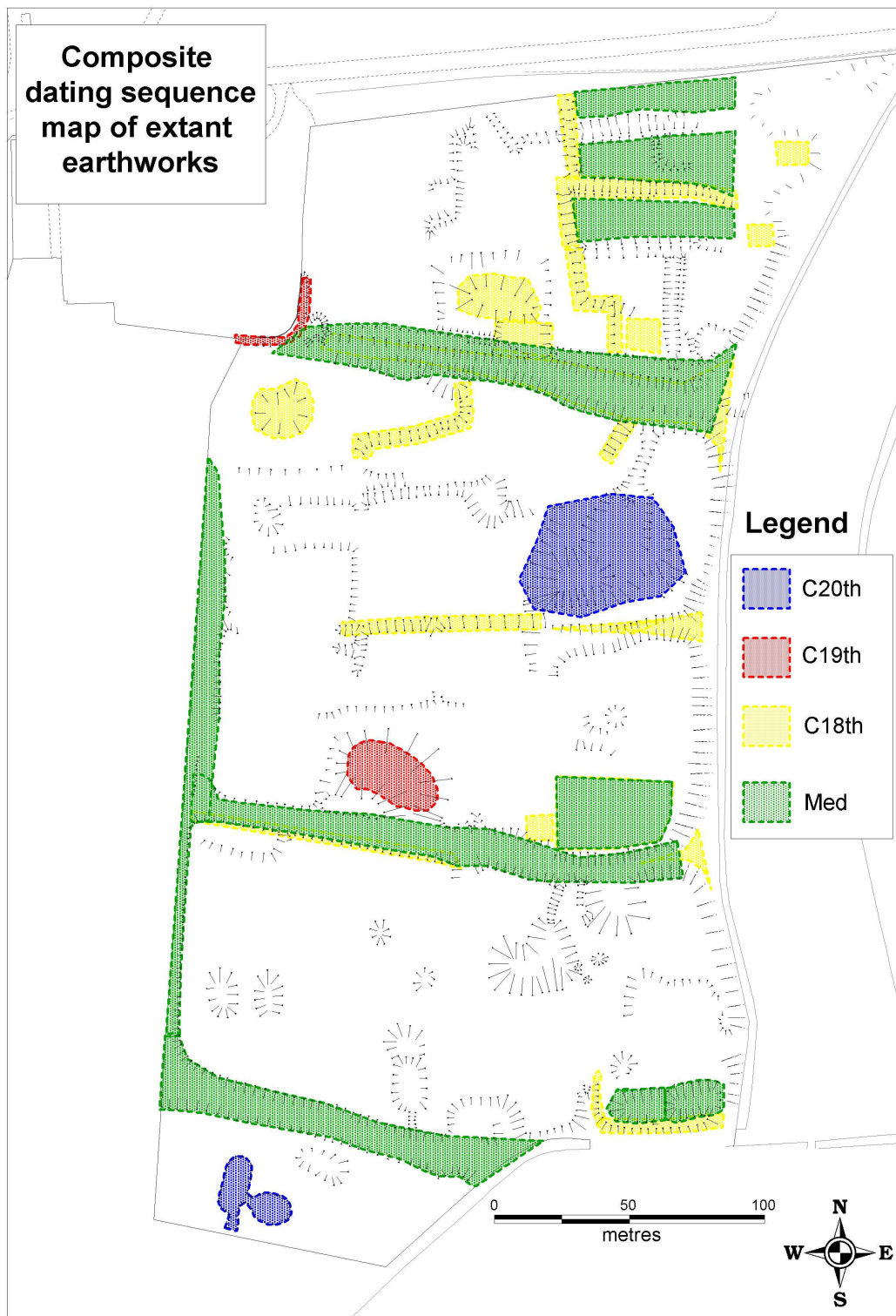
Figure 21: Possible surviving medieval earthworks

The following section relates to the features highlighted in green in figure 21 above. These represent the extant earthworks which are likely to be of medieval origin, and include a number of the features present on the 1750 map. There are a number of features which may also be medieval, but cannot be said to be so with very high confidence levels. These are discussed in the final section relating to the composite map.

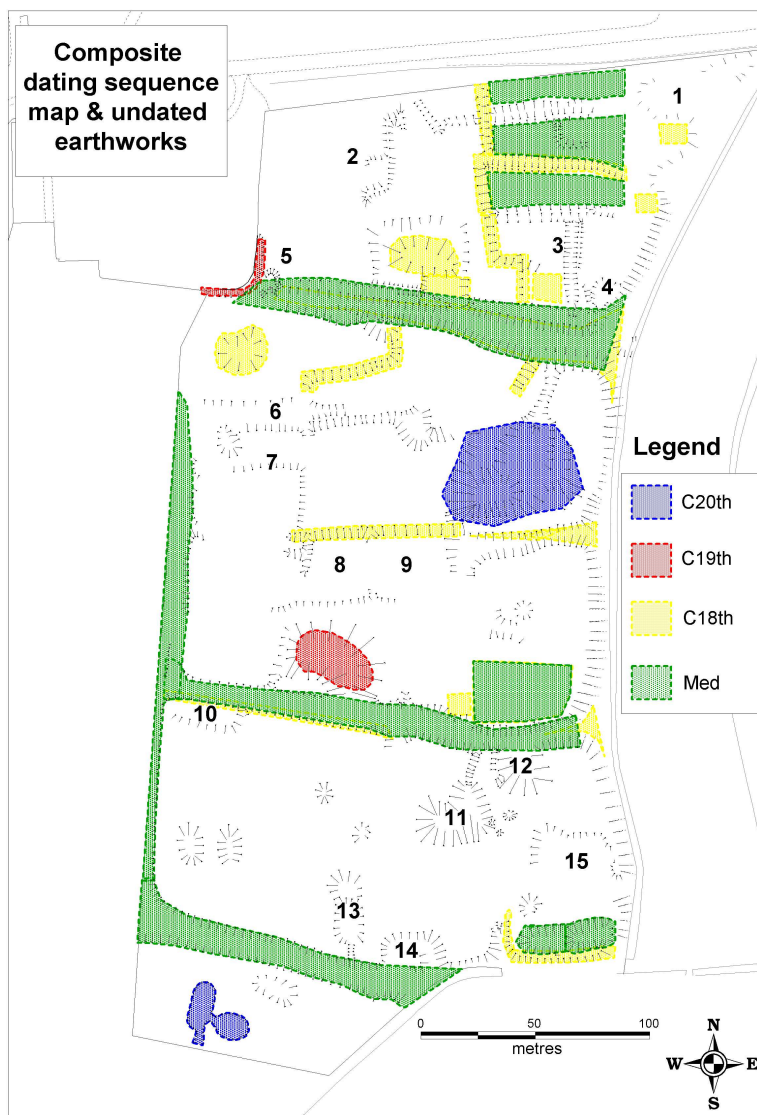
Features 1, 2 and 3 are rectangular enclosures surrounded by banks and ditches. These enclosures appear to line up with a number of properties as shown on the 1750 map. They appear therefore to be medieval Crofts

associated with buildings on the river front. This would suggest that the terrace level along the river front acted as access to these properties. They were joined together to form the larger land parcels depicted on the 1750 map. Feature 4 is the large village street depicted on the 1750 map. The holloway is a large feature. The surviving earthwork extends over 150 metres from west to east. At its western end it is a shallower feature, only a few centimetres deep, and at this point the holloway is 12m across from the tops of the slopes, and 4 m at the bottom of the slope. The holloway gradually widens and deepens to be 20m across from top of slope to top of slope, 6m wide from bottom of slope to bottom of slope, and 2.5 metres deep. The size of this earthwork suggests it is of significant age. It has therefore been interpreted as of likely medieval origin. Feature 5 is the surviving graveyard of the demolished village church. The village church is not adjacent to the surviving village main street in 1750, and is serviced by the holloway represented by feature 6. It is assumed the holloway is contemporary with the churchyard, and therefore is likely also to be medieval. There is a possibility it was the village main street itself at some point, with focus migrating to the more northerly street over time, however this cannot be proved by earthwork survey alone. Features 7 and 8 are also holloways with feature 7 being perpendicular to and forming the linking street between the other 3 main holloways. The holloways 6, 7 and 8 are not included on the 1750 map, perhaps suggesting they had gone out of use in the post medieval period. Feature 9 is a pair of oval shaped depressions or pits cut into the ground. These are situated at the lowest part of the surveyed area, and would have been prone to regular flooding. Their location makes them strong candidates for stew ponds, possibly even the ones mentioned in Domesday Book.

7.5. Composite Map



7.6. Discussion of remaining earthworks



Features

1. Area of ground removal, demolition deposits and animal burrowing.
2. Linear boundary banks
3. Linear ditch
4. Animal burrows
5. Dumped material.
6. Shallow U-shaped holloway
7. Two possible platforms
8. Possible platform

Figure 23: Composite map and remaining features.

9. Possible platform. 10. Platform. 11, 12, 13, 14 & 15. Hollows or areas of extraction.

The map in figure 23 above shows the remaining earthworks that have not been attributed a date in the conclusions so far. The area in the north east corner of the map is an area where the river cliffs have disappeared, or are significantly lower than in the central- eastern part of the site. There were buildings in this area on the 1750 map, and the crofts on the medieval map suggest there were buildings here in the medieval period also. Within the ground there is evidence of brick and tile and other demolition material, the

area has suffered from robbing out by humans, and from the action of burrowing animals. Burrowing has also caused the destruction of earthworks at location 4 at the eastern end of the main holloway. Active burrows are present along the former river cliffs between the main holloway and the churchyard. The churchyard itself is also suffering from such activity, with damage occurring on its southern side, and rabbit burrows throughout (see the photographic archive in appendix 1, also see the West Burton Churchyard Survey in Appendix II). There are a number of small hollows across the site which have not been allocated a number in the map above. It is suggested here that these are the result of animal burrowing, and possibly previous locations of cattle troughs. Feature 2 represents a number of linear banks which are probably the remnants of land divisions. Feature 3 is a linear ditch with a small bank running along its eastern edge. The presence of the bank suggests this is most likely some land division, rather than a v-shaped holloway. Feature 6 is a shallow flat bottomed or u-shaped holloway which runs east to west. It runs into a shallow and narrow v-shaped holloway to the east which terminates in a hollowed out area at its eastern end. Features 7, 8 and 9 are flat square areas that may represent abandoned former housing platforms. Feature 10 is a slightly raised rectangular platform which sits adjacent to the right angle of the join of two holloways, this would be an obvious location for a property. A speculative medieval date could be given to such a platform due to its association with two likely medieval holloways. Features 11, 12, 13, 14 and 15 are all hollowed out areas. Features 11, 12, 13 and 14 are all in the proximity of the large east-west holloways which could suggest they are robbed out areas which formerly could have been the sites of buildings. Once again their association with possible medieval holloways abandoned by 1750 suggests they are of medieval age. The hollow of feature 15 seems to relate to a building shown in 'Moaty yard' on the 1750 map.

7.7. Summary

The site of West Burton deserted village is a complicated one, with many phases of development, occupation and decline, as is to be expected of a village occupied for many hundreds of years. West Burton provides a great

opportunity, with the survival of an approximately cartographically accurate map of the site from the 18th century. The map and survey combined provide an opportunity to interpret extant surveyed earthworks from that period, as well as providing a starting point for interpreting other earthworks both later and earlier in the sequence. The dates ascribed to the earthworks in the conclusions drawn above are conjectural, based on relative dating based on field observations, the production of an interpretive hachure plan, 3D analysis, and map regression techniques. Archaeological earthwork survey is useful for relative dating of site sequences. However it cannot provide absolute dating, and can only give a limited understanding of use. Archaeological surveys often raise as many questions as they provide answers. If more than a broad context is required then future work can be used to answer questions raised by the survey.

8. Suggested further work

Using the accurate mapping produced by the survey and the interpretations and conclusions drawn above, targeted geophysics could be employed to help further understand subterranean features. This could be aimed at suspected building platforms, or in hollows where building may have once stood, to look for buried foundations. The techniques and equipment used would need to be suitable for use on Glacial Boulder Clay or Till (Gaffney & Carter 2006).

It is hoped that a third season of Archaeological earthwork survey could expand the area covered to include the large field to the west of that so far surveyed. This would take in the remainder of the deserted village site, and some of the surviving ridge and furrow of the open field of the parish.

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