

YORK



ARCHAEOLOGICAL
TRUST

**ROUGHAM FARM,
ARKENDALE,
NORTH YORKSHIRE**

NYCC HER	
SNY	7490
ENY	468/1188/1189
CNY	2226
Parish	6071
Rec'd	10/12/2002

**REPORT ON AN
ARCHAEOLOGICAL
DESK-TOP STUDY AND
GEOPHYSICAL SURVEY**



**2001 FIELD REPORT
NUMBER 48**

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NYE 1189 (GEO-WEST).

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14. ARCHAEOLOGY / HERITAGE

14.1 Introduction

This chapter provides an assessment of the known (and likely potential) archaeological resources within the application site. The scope and methodology adopted to assess the potential effects of the proposed development on archaeology/heritage are also described. Archaeological/heritage resources are defined as below (and above) ground remains, artefacts/ecofacts or soil deposits and structures of known or potential cultural significance.

The chapter is structured as follows:

- Section 14.2:** Outlines the assessment method and consultations undertaken
- Section 14.3:** Details the findings of the desk study works
- Section 14.4:** Describes the results of the walkover surveys completed
- Section 14.5:** Describes the results of the geophysical surveys
- Section 14.6:** Assesses the potential significance of the findings in the previous sections
- Section 14.7:** Draws conclusions with regard to the archaeological and heritage aspects of the proposed development.

14.2 Assessment Method and Consultations

The assessment of areas of potential archaeological interest at which development is proposed should be undertaken in accordance with the guidance in Planning Policy Guideline 16, commonly referred to as PPG16. With reference to the proposed development this policy is operated via the offices of the County Heritage Unit, North Yorkshire County Council. No Scheduled Ancient Monuments or Listed Buildings (which have a special legislative status) are affected by the proposed development.

The principal archival sources of information used for the assessment were:

- Sites and Monuments Record Office (North Yorkshire County Council)
- County Record Office (North Yorkshire County Council)
- National Monuments Record (English Heritage)
- York Central Reference Library

The data obtained from these sources was of several categories:

- Plotted and un-plotted air photograph crop-marks and earthworks
- Published works on local excavations
- Unpublished archaeological evaluation and assessment reports
- Historic maps, 1800 - late 20th century
- Records of individual features and finds

The area of the proposed development and its immediate surroundings were the subject of a walkover survey and geophysical survey. This latter component was carried out in suitable areas, i.e. away from buildings, areas of hard standing, hedges and fences. The archaeological fieldwork was carried out in two phases, these being designated the east and west parts of the site. The western area is presently occupied by farm buildings and pasture and forms the site

of the proposed abattoir. The eastern area is occupied solely by pasture and is the site of a proposed waste treatment works.

(N.B. outfall for the effluent treatment plant has been agreed in principle with the Claro Drainage Board. Therefore, additional geophysical survey works will be required for the alignment of the drain. The results of this survey work would be issued as an addendum to the environmental statement.)

The information for the desk-based assessment was derived from the archival sources cited in this section on 21st August 2001. The walkover survey of the western area of the site was carried out on 4th October 2001 and a geophysical survey took place between 4th and 12th October 2001. A walkover survey of the eastern area was carried out on 22nd November 2001 and a geophysical survey undertaken on the 17th-18th November 2001.

14.3 Desk Study

The proposed development site lies within the parish of Marton cum Grafton, some 1.7km south-west of the village of Marton. A number of prehistoric and historic finds and features have been recorded in the locality. These can be detailed on a period by period basis and the majority are shown on Figure 14.1 by site number.

14.3.1 Prehistoric

The oldest reported object in the study area is a Neolithic (circa 4,500 - 2,300 B.C.) stone axe head ploughed up at Marton cum Grafton and presented to the Yorkshire Museum in 1927. The precise find spot of this object was never established. Whether this relates to casual loss or burial within a grave, or otherwise, is not known.

A small Iron Age (circa 700 B.C. - 43 A.D.) hillfort or palisaded enclosure has been recorded at Grafton Hills within Marton village (Site 1). This site had already been largely quarried away prior to a small scale excavation in 1949. As virtually nothing remained of this site it was de-scheduled in March 1998.

Further evidence pointing towards occupation in the locality during the Iron Age/Romano-British period is indicated by a number of cropmarks on aerial photographs (Sites 2, 3, 4, 5, 6 and 7. SMR: SE 46 SW A.P.'s 57, 53, 54, 38, 37 and 39 respectively). Typically these show a variety of enclosures and probable trackways. Slightly further afield Iron Age features have been positively identified and excavated near Flaxby 1.0km north-west of the A1/A59 junction.

A log or plank boat was dug up by labourers in 1797 whilst digging in the Carr approximately 700m north-east of Rougham Farm (Site 8). Subsequently destroyed, this craft was located in an area likely to have once formed a lake or drainage area. The date of the boat is uncertain and may, for example, be of medieval rather than prehistoric origin.

14.3.2 Romano-British

The only recorded find from the area likely to be of Romano-British date (43 A.D. - 410) was a fragment of grey, wheel turned pottery that was recovered from the spoil heap of a gravel pit in 1947 (Site 9).

It should be noted that some, at least, of the cropmark sites listed as 2 - 6 above may relate to activity during the Romano-British period. Areas of demonstrably intense occupation during this period are attested several kilometres away from the site.

14.3.3 Anglo-Saxon

Archaeologically, there is an absence of material relating to this period (410 A.D. - 1066). Historical sources, however, suggest that the general pattern of settlement within villages and

hamlets, much as exists today, was already established in the area by the time of the Domesday Survey of the later 11th century. The settlements of Marton, Grafton and Arkendale are all recorded in the survey of 1068. It is likely that much of this pattern evolved during the Anglo-Saxon period.

14.3.4 Medieval

Throughout this period (1066 A.D. - late 15th century) the picture of rural settlement in the locality would appear to be one of occupation within the established villages. This pattern largely followed that of the Anglo-Saxon period. Away from the village focal points the landscape would have been dominated by large open fields and areas of woodland. Some indication of the extent of arable lands, and their distance away from villages, is provided by aerial photographs showing ridge and furrow field systems. Traces of ridge and furrow survived into the latter part of the 20th century immediately south of Rougham Farm (Site 10) and close to the route of the proposed drain connection on the north side of Braimber Lane (Site 11). All upstanding traces of the field systems of sites 10 and 11 have been removed by modern ploughing. Further, extensive areas of ridge and furrow are recorded by the North Yorkshire SMR approximately 1km to the south and east of Rougham Farm, well beyond the area of proposed development.

14.3.5 Post-Medieval to Recent

The principal changes to the landscape during this period relate to the enclosure of agricultural lands. The map of 1800 (Figure 14.2) shows the area of Rougham Farm after enclosure as consisting of a patchwork of fields, many of fairly small size. Comparison of the alignment of some of these fields with that of the ridge and furrow field system immediately south of the farm shows that the orientation of the enclosure fields was, to some extent at least, determined by this earlier agricultural system. The map of 1909 (Figure 14.3) indicates a reduction in the number of fields, this being achieved chiefly by removal of certain of the hedged boundaries. The inheritance of a medieval alignment can still be followed in a number of the extant field boundaries (Figure 14.1). Reflecting a broad post World War 2 national trend, the number of fields presently in the vicinity has reduced considerably creating a network of much larger fields.

Within the region field enclosure led to a proliferation in the building of isolated farmsteads away from the villages. This includes those of Holly Bank and Nineveh Farms immediately to the south. Within this context, Rougham Farm is of very late date being founded in the early part of the 20th century. Ponds for livestock were often created on post-enclosure farmsteads such as those at Rabbit Hill (Site 12) and Rougham Farm (Site 13). The pond on Rougham Farm is first depicted on the 1st edition Ordnance Survey map of 1855. The buildings of Rougham Farm itself are of very late date and of little historical interest. The map of 1800 along with later 19th century maps indicate a total absence of buildings at the site; the area being depicted as laid entirely to fields. The map of 1909 shows a similar arrangement to have persisted through to the 20th century. Recent discussions with the site owner has revealed a plan dating to the 1920's which shows a series of proposed brick land drains, indicating 20th century land improvement in the eastern part of the site.

14.4 Walkover Surveys

14.4.1 Walkover of Western Area

On 4th October 2001 a walkover survey of the farm buildings and their surroundings was carried out (Plates 1 and 2).

Three buildings extant at the farm appear to relate to its establishment in the earlier 20th century, the farmhouse and two farm buildings. The two storey farmhouse is constructed of

rendered brickwork, has a large bay window in its west facing frontage and is of earlier 20th construction. The structure has been altered and extended and recently had timber windows replaced with upvc units. A large sub-divided, rectangular, brick built, single storey building is located immediately east of the farmhouse. Behind this is a further single storey brick-built structure of much smaller proportions. Both structures relate to the keeping of livestock and are likely to be of the same age as the farmhouse.

There are a number of more recent farm buildings at the site. These include a small mid 20th century Dutch Barn, two late 20th century steel framed buildings and a recent unfinished steel framed brick building.

None of the farm buildings, including the house and two early farm buildings, are of especial architectural or historical interest.

All the land immediately surrounding the farm buildings and within the area of proposed development is improved pasture, i.e. has been ploughed and laid to grass for grazing. Of those historic agricultural features visible on later 20th century aerial photographs immediately south and south-east of the farm buildings (see section 14.3.1), namely the ridge and furrow and pond, only the pond survives as an upstanding earthwork. All above ground traces of the ridge and furrow have been lost to plough action.

The former presence of the ridge and furrow was not detected by the geophysical survey but a further indication is given by the east – west aligned field boundary to the south of the pond. This boundary displays a slight, but distinct, reverse “S” in plan-form that is often characteristic of these early field systems. Curiously, the curve of this boundary appears more accentuated on the ground than it does on the Ordnance Survey map.

The sub-rectangular pond, which measures up to 38m x 18m, has to some considerable degree silted up. This pond, which will have been created for the watering of livestock, appears to interrupt the pattern of former ridge and furrow and therefore post-dates the field system.

The only other features noted in the walkover survey were a series of narrow linear grooves, occasionally associated with a slightly elevated area between the grooves, located parallel and immediately to the north of the existing farm track. The morphology of these features and their proximity to the existing track suggest that they have originated as ruts created by wheeled vehicles, perhaps – given the sharpness of their appearance - in the very recent past.

Field boundaries at the site are a mixture of hedges and fencing, the latter all of modern date. Whilst at least one of the hedges preserves the alignment of strips within a ridge and furrow field system, none of the hedges is thought to pre-date enclosure.

14.4.2 Walkover Survey of Eastern Area

A walkover survey of the eastern area was carried out on 22nd November 2001.

The eastern area is formed of undulating ground. A hedged boundary aligned in a north – south direction bisects the area into two parts of approximately equal size. In the western part the ground slopes down towards the south and the east. In the eastern part the principal ground slopes are downwards towards the north and western sides. All land within the eastern area is occupied by improved pasture.

Ground level in the western part is generally around 0.6m higher than that in the eastern part. This difference is likely to be as a result of a build-up of soils towards the lower end of the ground slope caused by plough action in the western part.

No surface indications of archaeological remains were visible.

14.5 Geophysical Surveys

14.5.1 Western Site Area

A detailed geophysical survey of the two fields to the east of Rougham Farm was carried out between 4th and 12th October 2001 (Figure 14.4). The survey employed a portable fluxgate gradiometer (magnetometer) with the aim of detecting anomalies in magnetic susceptibility and permanent magnetisation associated with subsurface archaeological features.

Geophysical anomalies detected by the magnetometer in both fields were generally weak and diffuse, indicating a low amplitude of variation in subsoil magnetic susceptibility. However, the fields are characterised by a low density of ferrous litter, as indicated by minor magnetic dipoles: this feature has assisted the detection and characterisation of weaker anomalies of possible archaeological interest. The results are displayed as a grey scale plot (Figure 14.5).

Ferrous debris along the former field boundary in the southern field can be seen as a broad band of small scale intense magnetic dipoles (Figure 14.7 f3). Evidence for similar concentrations of ferrous or brick litter around the pond (Figure 14.7 f3) and at points north and south of the farm track (Figure 14.7, f1 and f2). These features are believed to be of modern origin and thus of no archaeological interest.

About 50m east of Rougham Farm the survey detected a set of very weak and diffuse negative magnetic anomalies, of largely sinuous shape, which can be traced for a distance of more than 100m (Figure 14.7, f4, f5 and f6). It seems likely that these reflect variations in the topography or composition of the rockhead, or some change in lithology of the overlying drift. However, it is possible that concentrations of rocky material along former field boundaries, farm tracks or the revetments to some other form of enclosure are responsible for these anomalies.

A further extended anomaly of the type described above was mapped 15-20m south of the former fence line and can be traced east-north-east/west-south-west for almost the entire length of the southern field (Figure 14.7, f7). This anomaly appears to be broken by the pond, suggesting that the target structure predates the pond. It seems most likely that the feature comprises stony material along a former field boundary or trackway.

About 50m south of the former fence line a negative linear magnetic anomaly was detected (Figure 14.7, f8). This was oriented east-north-east/west-south-west and appeared to originate or finish to the south of the pond. It may represent a plastic or concrete pipe carrying water to the pond or the stony debris along a former field boundary.

Of possible archaeological interest is a 25m diameter circular area, immediately south of the pond, within which the geophysical texture is rougher than in the immediate surroundings (Figure 14.7, f9). This zone has been explored using a variety of image processing filters but no internal structure of archaeological interest was apparent. The circular nature of the anomaly may suggest the presence of a ring ditch type feature, possibly degraded by ploughing, but a geological source for the anomaly cannot be ruled out.

14.5.2 Eastern Site Area

A second phase of geophysical survey was carried out on 17th and 18th November to the east of the previous study area (Figure 14.4) using the same techniques as those employed in the western area. It is interesting to note that the geophysical data contain no trace of the former fenceline passing through the west half of the study area, suggesting that this was a short-lived boundary. The results are displayed as a grey scale plot (Figure 14.6).

Several dense concentrations of intense magnetic dipoles have been detected, almost certainly reflecting deposits of brick, iron and other farm debris (Figure 14.8, f1, f2, f3 & f4). The largest concentration is present on an area of low-lying pasture in the north-east corner of the

survey area, suggesting that rubble may have been deposited here to raise the ground level and improve drainage.

A negative magnetic anomaly, 5-10m wide, has been detected in the form of an arc at the foot of the slope east of the manure heap (Figure 14.6). This anomaly can be traced for a distance of about 100m and probably represents the course of a former farm track (with rubble surfacing), or possibly a band of low-susceptibility sediment within a palaeochannel (Figure 14.8, f5).

The dominant geophysical anomalies in the east field of the study area comprise a set of parallel, north-south oriented positive magnetic lineations, the longest of which can be traced for a distance of almost 180m (Figure 14.6). These anomalies (Figure 14.8, f6) do not respect the hillslope contours in this position which broadly form an 'amphitheatre' with an open aspect to the west. This appeared to rule out their interpretation as land drains. However, the plan mentioned above (14.3.1) appears to show land drains in roughly these positions.

Careful examination of the geophysical image suggests that a ditch-type feature (Figure 14.8, f7) may be present as a curving or hook-shaped extension to feature f6. However, the possibility cannot be ruled out that this anomaly reflects a natural pedological or geological structure.

A set of very weak and diffuse positive magnetic lineations have been mapped immediately south of debris scatter f4. These anomalies may reflect minor soil-filled ditches or alternatively subsoil disturbance created by farm vehicles (Figure 14.8, f8).

The geophysical image of the western field contains a number of intriguing positive magnetic lineations in a rectilinear network whose main components are oriented east-north-east/west-south-west. None of these anomalies can be traced east into the adjoining field and the pattern does not appear to relate to the land contours. Hence, on the basis of the evidence available at the time of the survey, it was only possible to conjecture that these anomalies may reflect small-scale silted ditches, possibly related to former field systems or other types of enclosure (Figure 8, f9, f10 and f11). One set of magnetic lineations is seen to define a parallelogram, with sides 20x20m, in the north-west quarter of the west field (Figure 8, f12). Comparison of the recently discovered drain plan with the geophysical interpretation leads to the conclusion that these are, in fact, 20th century land drains.

14.6 Impacts on Archaeology / Heritage Resources

14.6.1 Direct Impacts

The only features of any archaeological interest in the area of development that have been detected through the variety of investigative media are the below ground remnants of possible former field boundaries or tracks, a ridge and furrow field system and a pond, the latter of probable 19th century origin. Parts of these features will be impacted on by the proposed development. However, given their poor states of preservation the loss of these archaeological remnants should be considered tolerable.

In the eastern area a number of linear geophysical anomalies were detected. The regularity of these combined with evidence of a 1920's plan of the area showing the layout of proposed brick built drains of broadly similar alignment suggests that these may be one and the same.

14.6.2 Indirect Impacts

No Scheduled Ancient Monuments or Listed Buildings (which have a special legislative status) are anticipated to be directly affected by the proposed development through land take. However, there is potential for visual impact to Marton, a conservation area. Refer to Chapter 11 for further detail.

14.7 Conclusions

The area of development and its immediate surroundings have been subjected to geophysical and walkover surveys in addition to desk-based assessment. Few features of archaeological interest have been identified. It is concluded that in light of their poor preservation the loss of parts of these features would not be a significant environmental impact. Geophysical survey has already led to the effective production of scaled plots of possible features within the area of development that would not be significantly enhanced by any further survey work. No further archaeological work is recommended.

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Plate 14.1. Rougham Farm buildings viewed from the south.



Plate 14.2 Fields to east of Rougham Farm viewed from the south.





Based on the Ordnance Survey map with the permission of the Controller of Her Majesty's Stationary Office, © Crown Copyright. AL 100020098.



NOTES :

Job Title	
P.Hutton Limited ROUGHAM FARM	
Drawing Title	
MAP SHOWING EARTHWORKS AND CROPMARKS	
Scales	Originator
Checked	Approved Date
Job No.	Drawing No.
67162/00.	Figure 14.1
Rev.	

Rev.	Date	By	Description
Drawing Status			

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