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**THE WILLOWS, REIGHTON,
NORTH YORKSHIRE.
SITES A & B
ARCHAEOLOGICAL
EVALUATION REPORT**

Site Code: RWA04 &
RWB04
NGR: TA 1155 7420 &
TA 1486 7345
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Report prepared for Roc Oil (UK) Ltd

by

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Summary

- *A programme of archaeological trial excavation was carried out on approximately 2ha of agricultural land at The Willows, Reighton, North Yorkshire, to inform planning decisions in advance of commercial development. The evaluation was divided into two separate sites, Willows A and Willows B.*
- *The trial excavation exposed archaeological features in only one of the trenches examined, located in the south east corner of Site B. These features comprised two boundary ditches forming part of an enclosure. The nature of worked flints from their fills suggests settlement activity in the vicinity, and it is possible that one of these ditches is associated with an extensive curvilinear anomaly; detected during a previous gradiometer survey of the area.*
- *The archaeological potential of Site A is considered to be low.*
- *The archaeological potential of Site B is considered to be low to medium, where there appears to be a restricted foci of activity situated towards the south-east side of the site*



Fig. 1: Site location plan showing Sites A and B outlined in red.
1:25,000

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1.0 Introduction

Roc Oil (UK) Ltd. commissioned Pre-Construct Archaeology (Lincoln) to undertake a programme of archaeological field evaluation. These works were undertaken to fulfil the requirements of North Yorkshire County Council in advance of a planning application for the construction of a gas exploration well site. This approach complies with the recommendations of *Archaeology and Planning: Planning Policy Guidance Note 16*, Dept. of Environment (1990); *Management of Archaeological Projects*, EH (1991); *Standard and Guidance for Archaeological Excavations*, IFA (1994).

The evaluation took place between the 10th and 19th of February 2004, and this report documents the results of that investigation. It incorporates a series of assessments by specialist researchers who studied the archaeological materials recovered during the fieldwork.

2.0 Site location and description

Both sites lie in the administrative district of North Yorkshire in the parish of Reighton, approximately 8.5km north-west of Bridlington and 15.5km south-east of Scarborough.

The areas of investigation (hereafter Sites A & Site B) comprised two rectangular units of approximately one hectare each.

Site A is situated 1.7km south-west of Reighton and approximately 1.2km north-east of the former settlement of Bartindale. It is located in the south-west corner of a field currently supporting a young cereal crop, the western edge of which is a parish boundary. The local geology comprised a plough soil directly over Flamborough Chalk Formation bedrock (on-site observation and BGS, 1998a). The site slopes down to the south-west. The national Grid Reference for the site centre is TA 1155 7420 and the mean elevation 77m OD.

Site B is situated 2.6km south-east of Reighton and approximately 1.2km south of Speeton. It is located on the eastern side of a predominantly level field, currently supporting a crop of oilseed rape; the western boundary of the site is formed by New Road, the other three by arable land. The local geology comprised Devensian glacial till overlying Upper and Lower Cretaceous chalk (BGS, 1998b). The national Grid Reference for the site centre is TA 1486 7345 and the mean elevation is 105m OD.

3.0 Planning background

In advance of a planning application for two well exploration sites at Reighton, North Yorkshire, North Yorkshire County Council Planning Policy Control requested that the developer, Roc Oil UK Ltd. should commission an initial geophysical survey of the proposed well sites as well as an assessment of aerial photographs in the vicinity, (Allen *et al.* 2003 a & b).

Following the completion of non-intrusive survey works in 2003, North Yorkshire County Council Planning Policy Control requested that the developer should provide further information: the results of a controlled programme of archaeological trial excavation. This information will form the basis of any decision relating to archaeological matters in the face of the proposed development, and is consistent with the recommendations of *Archaeology and Planning: Planning Policy Guidance Note 16*, 1990.

4.1 Archaeological and historical background, Site A.

Two distinctive monument classes dominate evidence for Bronze Age activity in the area: funerary round barrows and extensive dykes. Round barrows date possibly from as early as the middle Neolithic to the end of the early Bronze Age (c.3500 BC – 1500BC) and generally concentrate in cemeteries. Examples are known within 1km of the site and two of these are less than 100m to the north, straddling the parish boundary.

Elaborate and extensive systems of linear earthworks are recorded as cropmarks or soilmarks in the vicinity (and across North and East Yorkshire), known as 'Dykes'. Few intrusive investigations of these monuments have been undertaken, although it is believed they emerged in the later Bronze Age, dividing the land into distinct territories. This system is believed to have continued in use throughout the Iron Age. Several such boundaries appear to run towards the site from the south-west, although existing records do not show them continuing into the application area itself. However, as part of the desk based assessment (Allen *et al.* 2003), an analysis of existing aerial photographs revealed a soil mark within the field immediately to the west of the site that may be a continuation of one Dyke.

Settlement sites of early Bronze Age date are rare, and it is generally accepted that a predominantly mobile human existence continued into the middle Bronze Age (Woodward 2000). Certainly, for the study area there are no settlement sites that can be positively identified as being contemporary with the round barrows, or later.

The greatest numbers of monuments of a single type within the vicinity of the site are the distinctive square barrows, exclusively dating between the middle to later Iron Age (generally c.400 BC – post 100 BC). More than 300 examples are known (from cropmark evidence), all to the south, south-west, west and north-west of the site. This 'Arras culture' tradition was concentrated mainly on the Yorkshire Wolds, although examples are known throughout England (Woodward 2000). Inhumations were placed under small square burial mounds, often with associated grave goods, such as brooches, beads, other ornaments and pottery. Rare examples contain the remains of two-wheeled carts. The SMR records both square enclosures and burial pit cropmarks as being of this distinctive funerary practice.

Three of the SMR entries in the site locale indicate the presence of both ring ditches and square ditched cropmarks. These may reflect a tradition of cemetery continuity, with an earlier Bronze Age cemetery being re-used in the Iron Age. Alternatively, at least some of the ring ditches may be the remains of structures, or dwellings, dating to the Iron Age and thus, perhaps, being of similar date to the square barrows. At other Iron Age cemetery group sites, a similar arrangement has been noted, where monuments of the dead are interspersed with monuments of the living.

More tangible evidence of settlement dating to the late Iron Age is known in the area, the closest being a rectangular ditched cropmark enclosure less than 100m to the north-west of the proposed development area. A ditched enclosure cropmark and associated field system has also been attributed to the late Iron Age.

A palimpsest of late Iron Age – Romano-British settlement remains exist to the south-east of the proposed development area. Cropmarks show a dense and well-preserved series of trackways and associated enclosures, pits and field systems, some of which tie into modern boundaries, indicating the ancient origin of a number of the existing landscape features. Various recorded cropmarks identified as trackways have been identified as being of late Iron Age and/or Romano-British date.

There is no evidence of Anglo-Saxon activity within the study area, beyond the settlement name of Reighton that gives its name to the parish. In 1086 the settlement was recorded as '*Rictone*', from the Old English meaning 'farmstead by the straight ridge' (Mills 1996).

Medieval remains are sparse in the vicinity, although a mill is believed to have existed c.600m to the north-west of the site according to historical and cropmark evidence. At the south-western extreme of the study area an earthwork has been attributed to the deserted medieval settlement of Bartindale, which lies immediately outside the area of study.

4.2 Archaeological and Historical Background, Site B.

The chance discovery of a number of artefacts of early prehistoric date has occurred close to Site B. These finds have been grouped within the NYSMR, and include three Neolithic stone axes (one of quartz), a polished Neolithic axehead, a flint knife, and a Bronze Age bronze knife.

Two distinctive monument classes dominate evidence for Bronze Age activity in the area: funerary round barrows and extensive dykes. Round barrows date possibly from as early as the middle Neolithic to the end of the early Bronze Age (c.3500 BC – 1500BC) and generally concentrate in cemeteries. Examples are known in proximity to the site, three of the four of which are grouped together 500m to the north within a compound known as 'the old foundry'. The fourth lies over 500m to the north-west of the site.

Elaborate and extensive systems of linear earthworks are recorded as cropmarks or soilmarks close to the site (and across North and East Yorkshire), known as 'Dykes'. Few intrusive investigations of these monuments have been undertaken, although it is believed they emerged in the later Bronze Age, dividing the land into distinct territories. This system is believed to have continued in use throughout the Iron Age. The immediate vicinity is criss-crossed by a number of these linears, however none are shown to cross the application area itself.

Settlement sites of early Bronze Age date are rare, and it is generally accepted that a predominantly mobile human existence continued into the middle Bronze Age (Woodward 2000). Certainly, for the study area there are no settlement sites that can be positively identified as being contemporary with the round barrows, or later. There is however extensive cropmark evidence for later prehistoric and Romano-British settlement, concentrated both to the south and north of the site. These mainly comprise rectilinear and rectangular ditched enclosures, likely to represent field systems and/or settlement enclosures. A number of sites that remain undated are likely to form elements of this extensive settlement landscape.

Distinctive square barrows are also recorded, exclusively dating between the middle to later Iron Age (generally c.400 BC – post 100 BC). Only two examples are noted, one c.600m to the east, and the other c.800m to the north-west. This 'Arras culture' tradition was concentrated mainly on the Yorkshire Wolds, although examples are known throughout England (Woodward 2000). Inhumations were placed under small square burial mounds, often with associated grave goods, such as brooches, beads, other ornaments and pottery. Rare examples contain the remains of two-wheeled carts.

More unusually, a ring ditch cropmark 500m to the north has been identified as being of late Iron Age date. This site lies adjacent to a known Bronze Age round barrow cemetery. An earthwork mound at the same location is believed to be the terminal of ditch and trackway. A standing stone is recorded on the mound, although no further details are known.

A complex of cropmarks approximately 700m to the north-west of the site have been interpreted as a large field with internal sub-divisions and associated enclosures.

There is no evidence of Anglo-Saxon activity within the study area, beyond the settlement name of Reighton that gives its name to the parish. In 1086 the settlement was recorded as '*Rictone*', from the Old English meaning 'farmstead by the straight ridge' (Mills 1996). In addition, no remains of medieval date have been recorded within the study area.

5.0 Methodology

The primary purpose of an archaeological evaluation is to gather and collate information for planning purposes: to assess the archaeological potential of a site and provide a basis for mitigating against the effects of development. This approach is consistent with the guidelines set out in *Archaeology and Planning: Planning Policy Guidance Note 16* (1990).

To achieve the above, 8 trenches were excavated to examine a representative proportion of each site. The location of the trenches is indicated on figs. 2 & 7. These Trenches were located in order to target anomalies detected by a previous geophysical survey over the two sites, (Allen *et al.* 2003 a & b) as well as to examine apparently negative areas.

The trial excavation was undertaken by the author and a team of four experienced field archaeologists over a period of 8 days; between the 10th and 19th of February 2004.

For each trench, a 180° back actor fitted with a smooth blade was used to remove all topsoil, subsoil and underlying deposits in spits not exceeding 20cm in depth. The process was repeated until the first archaeologically significant or natural horizon was exposed. All further excavation was by hand.

Where possible archaeological remains were exposed, features and deposits were sample excavated manually, and context information was recorded on standard Context Record Sheets. Archaeological deposits were drawn to scale in plan and section. Archaeological contexts were photographed, and some prints are reproduced within this report (see Appendix 1).

Archaeological finds were recovered during the investigation (e.g. pottery sherds and lithics). They were washed and processed at the offices of PCA, prior to submission for detailed specialist appraisal. Additionally environmental samples were recovered from significant dated contexts; these were submitted to ARCUS (University of Sheffield) for processing and assessment.

6.1 Results. Site A.

A ubiquitous ploughsoil, (contexts 101, 201, 301 & 401) was removed from all of the trenches investigated. It comprised friable dark greyish brown silt with a considerable humic component, between 0.25 and 0.35m deep. This material had formed as a result of modern agriculture.

The ploughsoil was over a platy chalk bedrock which in places was partly covered by a sandy silt subsoil material. This deposit was recorded as 102 in Trench 1.

No archaeological features were encountered in the trenches investigated.

Trench 1. (figs. 2&3)

Once the ploughsoil 101 had been removed, the natural chalk bedrock was exposed, in places overlain by an irregular layer of subsoil 102. Two possible features, [105] and [107] were recorded cut into the bedrock, however investigation proved these to be of natural origin, formed by the action of tree or other roots.

Linear anomalies identified by geophysical survey running north-south at the western end of the trench proved to be tramlines formed by modern agriculture which were clearly visible on the surface. No evidence for the purported prehistoric 'dyke' was encountered.

In summary, no archaeological features were exposed in this trench.

Trench 2. (figs. 2&4)

Below the ploughsoil, natural chalk bedrock was exposed. Two features were visible cutting into this material, [204] and [206]. Both of these features were fully excavated but proved to be natural in origin: [204] was a large solution hole, while [206] was formed by root action. They correspond with discrete magnetic anomalies located by geophysical survey.

In summary, no archaeological features were exposed in this trench.

Trench 3. (figs. 2&5)

The chalk bedrock 302 was exposed immediately below the ploughsoil 301; cut into this bedrock were two features, [304] and [306]. The first [304] was a shallow root-formed feature, while [306] was interpreted as a small solution hollow.

This trench was positioned to examine possible ridge and furrow along with a 'blank' area; no archaeological features were exposed.

Trench 4. (figs. 2&6)

The uppermost deposit in this trench was ploughsoil 401, which sealed bedrock 402. The bedrock was cut by three features; [404], [406] and [408]. The morphology of these features and the nature of their fills indicated that they were almost certainly ice wedges. Feature [408] corresponds with a linear anomaly identified by geophysical survey.

In summary, no archaeological features were exposed in this trench.

6.2 Results. Site B.

The uppermost material removed from each trench was a mid to dark brown humic silty ploughsoil 0.30m deep, (contexts 501, 601, 701 & 801), formed as a result of modern agriculture. This sealed a subsoil (contexts 502, 602, 702 & 802) comprising slightly reddish brown clayey silt with occasional charcoal and chalk inclusions. Below this was a natural geological deposit of reddish brown silty clay with occasional gravely lenses, interpreted as glacial till.

Trench 5. (figs. 7&8)

Once the ploughsoil and subsoil had been removed a natural horizon of glacial till 503 was exposed. A machine excavated sondage through this deposit located the bedrock 504 approximately 0.3m lower down.

This trench was positioned to investigate an apparent area of magnetic variation that could have indicated burning or quarrying activity however no archaeological or other features were present.

Trench 6. (figs. 7&9)

Below the ploughsoil/subsoil, a mixed deposit of reddish clayey silt 603 was exposed. Within this material were a number of pockets of more gravely material, shown in fig. 9. A number of these were excavated, however they proved to be natural ice-wedge features. These natural features were not individually numbered. A machine excavated sondage at the southern end of the trench exposed the bedrock 604 approximately 0.4m below 603.

This trench was located to investigate an apparent 'blank' area of the site; no archaeological features were exposed.

Trench 7. (figs. 7&8)

This trench exhibited similar deposits to Trench 5 above.

Trench 7 was positioned to examine two possible linear magnetic anomalies, although, no archaeological or other features were present.

Trench 8. (figs. 7&10)

The uppermost materials removed comprised a topsoil and subsoil; similar to those seen elsewhere in the field. This exposed a natural till deposit 803 into which two linear features had been cut.

The latest of these features [805] had a shallow and slightly irregular 'u' shaped profile with a flat base. Its fill 804 was mid to dark brown sandy silt containing occasional charcoal flecks and flecks of fired earth which could not be recovered. A number of large water-rolled cobbles were recovered from this material, resting on the base of the cut.

A number of worked flints were recovered (see Appendix 3). They demonstrate that the manufacture of flint tools was taking place in the vicinity of the ditch. The morphology of these flint objects suggests that they were manufactured during the Early Neolithic period, although it must be borne in mind that the assemblage recovered was extremely small (probably too small to provide a reliable date).

Running almost at right angles to the above was a stratigraphically earlier ditch, [807]. This had a similar though slightly steeper profile with a more rounded base. The fill 806 was also dark brown sandy silt, containing occasional limestone fragments and charcoal flecks. Four small pottery sherds were recovered (see Appendix 4); three were very abraded and could only be loosely dated to the earlier prehistoric period, while the fourth may have been of early Bronze Age date.

This fill also yielded a number of worked flints; these took the form of blades, flakes and blade-like flakes as well as a single scraper. They demonstrate activity in the area but not necessarily core reduction as was the case with those recovered from 804. They appeared to be Early Neolithic in date.

Environmental samples were taken from each of the ditch fills (see Appendix 5), but these yielded no charred plant remains or other useful evidence.

Both of the above features corresponded closely with linear anomalies recorded by geophysical survey.

7.1 Discussion and conclusions: Site A

No archaeological features of any period were recorded in this field, although a number of negative features were exposed. These were excavated and proved to be naturally formed, a number of them exhibited tell-tale evidence of rooting; demonstrating that they represented the remains of trees or other plants, while others contained homogenous sterile materials suggestive of natural water or ice-formed structures, (Dincauze, 2000).

The presence of features recorded in Trenches 2 and 4 was 'predicted' by geophysical survey, suggesting perhaps that any other archaeological features in the area would have been detected by the same methods.

7.2 Discussion and conclusions: Site B

The majority of the trenches in this area (5-7) proved sterile, with only natural undulations in the subsoil/natural geological variation being identified; none of the features predicted by the geophysical survey were identified in these three trenches.

Trench 8 contained two linear features. These were dated by flint artefacts to the Early Neolithic period and appear to be elements of an enclosure located in the south-eastern corner of the study area. Examination of the geophysical survey results (fig. 7) suggests that ditch [805] may return north-eastwards, midway between Trenches 8 and 7.

The flints recovered from the ditches suggest that core reduction was taking place in the vicinity, indicative of blade manufacture (as opposed to the expedient use of flint tools). This raises the possibility that there is an Early Neolithic settlement/activity zone in the area and it is possible that the ditches represent the boundaries of that purported settlement as opposed to defining plots of agricultural land.

It should be noted that some conflict in dating arose between the flint/pottery identifications. This situation cannot be resolved entirely on the basis of existing information.

The majority of the North Yorkshire SMR entries in the vicinity of the site are located to the south east and are associated with the later prehistoric or Romano-British periods, although a ditched enclosure to the south-west may be contemporary with the ditched enclosure observed during the current phase of work.

8.0 Effectiveness of methodology

The methodology employed allowed the presence/absence and the depth of archaeological deposits to be determined in each of the excavated trenches, most of which were sterile. The use of a Leica GS50 Global Positioning System to locate the geophysical survey and trial trenching allowed any anomalies detected to be precisely targeted and investigated. Liason with John Foster from Roc Oil UK Ltd. allowed the work to be completed with minimal disruption to the crops in the fields concerned.

9.0 Acknowledgements

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10.0 References

- Allen, M. Brett, A. & Masters, P., 2003a. *Land at Reighton, North Yorkshire. Willows Site 'A' Archaeological Desk-Based Assessment and Detailed Gradiometer Survey*. Unpublished client report.
- Allen, M. Brett, A. & Masters, P., 2003b. *Land at Reighton, North Yorkshire. Willows Site 'B' Archaeological Desk-Based Assessment and Detailed Gradiometer Survey*. Unpublished client report.
- British Geological Survey, 1998a. *Scarborough. England and Wales Sheet 54. Solid and Drift Geology. 1:50000 Provisional Series*. Keyworth, Nottingham: British Geological Survey.
- British Geological Survey, 1998b. *Flamborough & Bridlington. England and Wales Sheet 55/65. Solid and Drift Geology. 1:50000 Provisional Series*. Keyworth, Nottingham: British Geological Survey.
- Dincauze, D., 2000, *Environmental Archaeology, Principles and Practice*. Cambridge University Press, Cambridge.
- Mills, A D, 1996, *Oxford dictionary of English place-names*. Oxford University Press.
- Woodward, A. 2000, *British Barrows. A matter of life and death*. Tempus Publishing Ltd., Stroud

11.0 Site Archive

The site archive for this project is in preparation and will be deposited at Scarborough Museum within six months. Access to the archive may be granted by quoting the archive entry number SCARB E523.