

**NORFOLK ARCHAEOLOGICAL UNIT**

Report No. 858

**An Archaeological Evaluation at A47 Acle Straight, Norfolk**

39599 HVG

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October 2003

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Local Authority No.076759

Fig.1 is based upon the Ordnance Survey 1:10,000 map with the permission of the Controller of H.M. Stationery Office © Crown Copyright 'Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings' Norfolk County Council, County Hall, Norwich (17/09/2003). **Reference copy: no further copies to be made.**



Location: A47 Acle Straight, Norfolk  
Grid Ref: TG 4020 1060 to TG 5180 0850  
HER No: 39599 HVG  
Date of Fieldwork: 11th to 14th August 2003

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## **Summary**

An archaeological evaluation by walkover survey and trial trenching was carried out beside the Acle Straight section of the A47 trunk road between Acle and Great Yarmouth. An adjacent suspected saltern (NHER site 21295) which was to be evaluated by trial trenching was found to be absent. Anecdotal evidence obtained from local landowners suggested that the feature was not of archaeological interest and had been removed some years earlier.

Several previously unrecorded earthworks were, however, identified. A linear feature situated adjacent to a relict channel was interpreted as being a levee which probably began to form whilst the area was still submerged and part of an estuary. On the area becoming dry land in the Saxon period the levee was exposed. Three sub-rectangular earthworks superimposed on the levee were interpreted as being the remains of structures. Lack of artefactual evidence means they cannot be dated with certainty at this time.

## **1.0 Introduction**

Norfolk Archaeological Unit was contracted to carry out a programme of archaeological work resulting from proposals to dual the Acle Straight (TG 4020 1060 to TG 5180 0850) which forms the A47 between Acle and Great Yarmouth in east Norfolk (Fig.1). The proposed route is a linear one which runs adjacently to the current A47, switching from the north side of the current route to the west of the Halvergate junction, to the south side east of this point. Its total distance is approximately 13km (see Figs 2, 3 and 4).

The work was requested and defined in a brief issued by Norfolk Landscape Archaeology (David Gurney 1 July 2003) and constitutes the first phase of a programme of archaeological work to be undertaken following the specifications set out in a Project Design prepared by Norfolk Archaeological Unit (NAU Ref: JB/1636). It will provide data to contribute to the Environmental Assessment report to be prepared by Hyder Consulting (UK) Ltd.

The work encompassed archaeological evaluation by walkover survey, trial trenching and subsequent assessment, analysis and report production.

The programme of archaeological work stipulated by Norfolk Landscape Archaeology was required in order to identify any possible archaeological sites not recorded in the Norfolk Historic Environment Record or included within the archaeological desk-based assessment reports for the scheme. This was to include the location of any possible earthwork sites, the examination of any exposed dyke edges and the evaluation by trial trenching of an extant earthwork of a mound (NHER 21295).

The work would attempt to recover information relating to the extent, date, phasing, character, function, status and significance of the route.

## **2.0 Geology and Topography**

### **2.1 Geology**

Norfolk is underlain by a platform of ancient rocks which inclines from about 200m below sea-level in the south-west to more than 1000m below sea-level at the coast in the north-east. These ancient (Precambrian and Palaeozoic) rocks are similar to those found at the surface today in Wales, the Pennines and Charnwood Forest, but in Norfolk they never reach the surface (Funnell 1994).

Overlying this ancient platform are Mesozoic and Cenozoic sediments, arranged in a series of superimposed sheets, which incline eastwards towards the southern North Sea. The oldest occur at the surface in western Norfolk, the youngest near the coast in eastern Norfolk.

The sedimentary rock underlying the survey area is white chalk which formed in the Upper Cretaceous period. From Norwich eastwards the chalk is overlain by marine, and sometimes shelly, sands and gravels (Norwich Crag Formation) which were laid down by a North Sea that extended far further inland than it does today (Funnell 1976).

### **2.2 Topography**

The area included in the walkover survey lies at a height of 0m OD and is essentially level pasture drained by a network of dykes and drainage pumps.

The present surfaces of the coastal and estuarine marshes of east Norfolk have their origins in the Holocene period and are the result of fluctuations in sea-level over the last ten thousand years resulting in the deposition of fresh water peats and marine muds, silts and sands. On the east coast estuary marshes (where the walkover survey was situated) the complete stratigraphic sequence is a five-layered sandwich with peat at the top, the bottom and in the middle separating beds of marine clays and silts. On pump-drained areas of the marshes the surface peat which lies under grass or arable has oxidised and the present land surface is the upper layer of marine sediment (Coles and Funnell 1981).

## **3.0 Archaeological and Historical Background**

Records of known archaeological remains along the Acle Straight which may be affected by the proposals are outlined in Bates (1993) and Penn (2000). The only known site that is immediately affected by the development is 'the mound possibly related to salt working' (NHER site 21295).

For most of its route the present A47 road from Acle to Great Yarmouth crosses what is essentially pastureland which is drained by dykes into the River Bure to the north and Breydon Water and the River Yare to the south. Saltworking sites and drainage mills in the area both indicate that the landscape was previously marshy or flooded. During the Roman period the area was open estuary, a large tract of open water and intertidal mud flats (Williamson 1997). Perhaps unsurprisingly, therefore, no finds of a Prehistoric or Roman date are recorded on the NHER for this area. As a consequence of changes in relative land/sea levels and the formation of a sand and gravel spit at the mouth of the estuary at Great Yarmouth it is thought that the area became steadily drier during Middle Saxon times, resulting in the mud flats giving way to tracts of salt marsh (Williamson 1997).

### **3.1 Salterns**

The formation of salt marshes in the Saxon period facilitated the beginnings of the salt industry in the area, the remains of which can still be seen today in the form of 'salt mounds' or salterns.

Finds of charcoal, slag and pottery, dating to the 11th to 13th centuries and found in a layer beneath a mound thought to be related to salt working at Ashtree Farm, which is situated on the southern bank of the River Bure approximately 0.75 km west of Great Yarmouth (TG 5050 0900, NHER site 4322), supports the theory that the marshes had developed areas of dry land by the early medieval period or were dry during a part of this time. The only known salt working site that is immediately affected by the development is 'the mound possibly related to salt working' (NHER site 21295).

### **3.3 Relict watercourses**

The transition from open water to dry land has left its mark on the landscape in the form of relict water courses of varying sizes ranging from small dry depressions a metre or so in width to much larger meandering channels. Several of these, as well as being utilised as large natural drains, have had substantial banks built up along them and were used as trackways through the marshes. Before the construction of the 'Acle Straight Turnpike' (now the A47) in the 1830s one such track, which ran alongside the Halvergate Fleet (a relict creek crossing the marsh) was the main routeway across the marshes to Yarmouth (Williamson 1997).

A relatively major relict channel traverses the area included within the proposal. This is known as the 'Northern Rond' (Fig.5) .

## **4.0 Methodology**

### **4.1 The walkover survey**

It was decided by Norfolk Archaeological Unit that a 30 metre wide corridor adjacent to the existing Acle Straight section of the A47 and covering the proposed route of the dualling scheme outlined above would be examined. Relevant maps would be carried and marked to identify current land use and any previously unrecorded archaeological remains. Any remains which were identified would be photographed in both colour and black and white, planned at an appropriate scale, assigned individual context numbers and recorded on standardised record forms employing Norfolk Archaeological Unit's *pro forma* recording system. These remains would also be scanned with a metal detector.

Exposed sides of dykes would be examined for artefact and ecofact scatters which would be sampled if encountered and soil horizons described.

### **4.2 Trial Trenching**

This aspect of the evaluation was concerned with a possible 'saltern' or mound related to the manufacture of salt (NHER site 21295). This feature is described on the Norfolk Historic Environment Record as a low mound (estimated dimensions 1 metre high, 25 metres across), crowned by a corrugated iron cowshed.

The Brief for Archaeological Evaluation stated that a single trench of not more than 15 metres length and 2 metres width should be excavated, using a mechanical

excavator with a toothless bucket, from the centre of the mound to its edge, with sufficient excavation of archaeological deposits to characterise the remains.

## **5.0 Results**

### **5.1 *The Walkover Survey***

Figures 2, 3 and 4 show the various types of land use which were observed along the route of the proposed development during the survey. These observations were recorded on a field by field basis. Sketch plans were drawn, field notes made and photographs taken of any features of possible archaeological interest encountered.

By completion of the walkover survey several earthworks had been identified which were deemed worthy of further attention and it was decided that aerial photographs of these areas should be examined. On examination of available aerial photographs most of the features identified in the walkover survey were discounted as being either the product of dyke dredging, modern agricultural practices (context 01) or the small natural relict channels mentioned earlier. One feature, however, proved to be of archaeological interest. Situated adjacent to and immediately north of the confluence of the Northern Rond and one of its tributaries which approaches from the north-west (see Figs 3 and 5; Grid Ref: TG 458088) this feature was observed and recorded in the field as a low linear earthwork which followed the course of the Northern Rond, and its tributary, in the area indicated. On subsequent inspection of the available aerial photographs (RAF TG4508) of the location it became apparent that additional, probably associated, features were present. These features take the form of ovoid/sub-rectilinear mounds and would appear to be superimposed onto the linear feature described above (Fig. 6).

### **5.2 *Observation of dyke edges***

Due to the high and lush vegetation which covers the dyke edges at the time of year that the survey was undertaken it was not possible to make any meaningful observations of them.

### **5.3 *Trial Trenching***

Attempts to locate the possible saltern (HER site 21295) which was to be evaluated by trial trench using relevant location maps proved fruitless. Enquiries were therefore made to local land owners and anecdotal evidence suggests that the feature was removed 'about ten years ago' and that it was not of archaeological significance but merely an accumulation of waste dumped by past tenant farmers.

## **6.0 Interpretation/Discussion**

### **6.1 *The linear earthwork***

Due to silting up of the channel and the levelling of its embankments the Northern Rond is now only discernible in the field by following the minor dykes which still follow its course. However its course can be followed on aerial photographs.

The embankments which confine the ronds on this expanse of marshland are not simply man-made but are also partly natural. The ronds would originally have been tidal and would have filled and overflowed at high tide. Heavier elements of the



sediment load suspended in the water would have been deposited close to the edge of the channel forming levees. Water levels fell during the Saxon period so that by the 10th century relative land /sea levels were more than 1.5 metres lower than they are today (Williamson 1997), drying the marsh and resulting in the levees standing higher than the surrounding terrain.

This naturally firmer and higher ground was an ideal platform for raising larger embankments or erecting structures for habitation or any other purpose.

The levees or 'walls' as they were known locally were the chosen location for most marsh farms: not only the surviving examples, but many of the lost ones such as Acle Marsh House, beside the Northern Rond (Williamson 1997).

It would seem then that the most likely explanation for the low linear earthwork (context 02) located in the area indicated on Fig. 3 is that it is an example of a length of surviving levee derived from the Northern Rond and its tributary. The smaller earthworks apparently superimposed onto it (03, 04 and 05) are probably the remains of structures positioned to take advantage of the higher, firmer base afforded by the levee. Establishing the date and function of these earthworks without archaeological excavation is problematic.

## **6.2 Possibilities of a Saxon origin**

A previous examination of the site at the now demolished Lockgate Farm (2km to the south of the earthworks) recovered pottery including sherds of Late Saxon Thetford-type ware. Systematic fieldwalking in the vicinity revealed two more sites both again apparently with origins in later Saxon times, possibly as early as the 9th century. Both produced substantial amounts of Thetford-type Ware. They also produced large quantities of oyster shells and animal bones, principally from sheep. Notwithstanding the fact that it remains possible that the material recovered in these field walking surveys was dredged material imported from elsewhere for disposal or manuring these examples illustrate that exploitation of and settlement on this area of marshland was possibly under way by Late Saxon times.

## **6.3 Possibilities of a medieval origin**

A number of medieval settlements are known from the heart of the marsh. Most take the form of low mounds whose character is revealed when pasture is converted to arable and they are ploughed. Halvergate Six Mile House (situated 1km to the north of earthworks (02), (03), (04) and (05)) stands on a low mound which has been incorporated into the southern wall of the River Bure. The present house is of 18th- to 19th-century date but trenches dug when renovations were taking place revealed an earlier farm dating to the 12th to early 13th centuries. Finds indicated that this early medieval establishment was involved in both salt production and sheep ranching. It is possible then that the earthworks in question represent the remains of outlying refuges for sheep or cattle from a marsh farm similar to the one outlined above or that they are the remains of a farm in their own right.

## **6.4 Possibilities of a post-medieval origin**

Although there was a gradual rise in relative water levels in the medieval / early post-medieval period there is no indication that this led to any interruption in the exploitation or settlement of the marshes. On the contrary a scatter of surviving leases shows that they had become valuable property (Williamson 1997). Sheep

grazing was becoming the chief occupation of the marsh farmers and references to permanent sheepcotes increase. Some medieval farm sites seem to have been abandoned and those discovered by the fieldwalking referred to above produced only small quantities of late and post-medieval pottery, suggesting sporadic use rather than permanent occupation. But where, as at Six Mile House, a modern farmstead occupies a medieval site occupation has surely been continuous.

The rising water levels meant that more attention must have had to be paid to flood defence measures. Even in early medieval times when relative sea level was between one and two metres lower than today the marshes had been vulnerable to flooding (which of course explains why medieval farms were built on low mounds and levees). This return to wetter conditions on the marshes must once again have made mounds, such as the levee discussed in Section 6.1, attractive places to build if they had not always been.

## **7.0 Conclusions**

As stated in Section 5.3 the mound suspected to be an earthwork associated with salt working, which was to be investigated by trial trenching, proved unlikely to have been of archaeological interest and had in any case been removed by a tenant farmer.

The features (03), (04) and (05) associated with the levee ((02), Grid Ref: TG458088) do not appear on any maps of the area and cannot be firmly dated or characterised without archaeological excavation. Examination of sites such as Halvergate Six Mile House and Ashtree Farm however has demonstrated that we can be reasonably sure that people were living and working in the area from at least as early as the 12th or 13th centuries. Evidence for a Saxon origin is made slightly more tenuous as the pottery from this period found in the fieldwalking surveys around Lockgate Farm did not come from secure contexts. The changes in relative land/sea levels discussed in Section 6.1, however, show that by the 10th century occupation of the area would have been a possibility.

## **Acknowledgements**

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The fieldwork was carried out by Kevin Moore and Michael Boyle.

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### **Appendix 1: Context Summary**

<b>Context</b>	<b>Category</b>	<b>Description</b>	<b>Period</b>
01	Earthwork	Sub-circular earthwork	Modern
02	Earthwork	Linear mound (levee)	Undated
03	Earthwork	Sub-rectangular mound	Undated
04	Earthwork	Sub-rectangular mound	Undated
05	Earthwork	Sub-rectangular mound	Undated



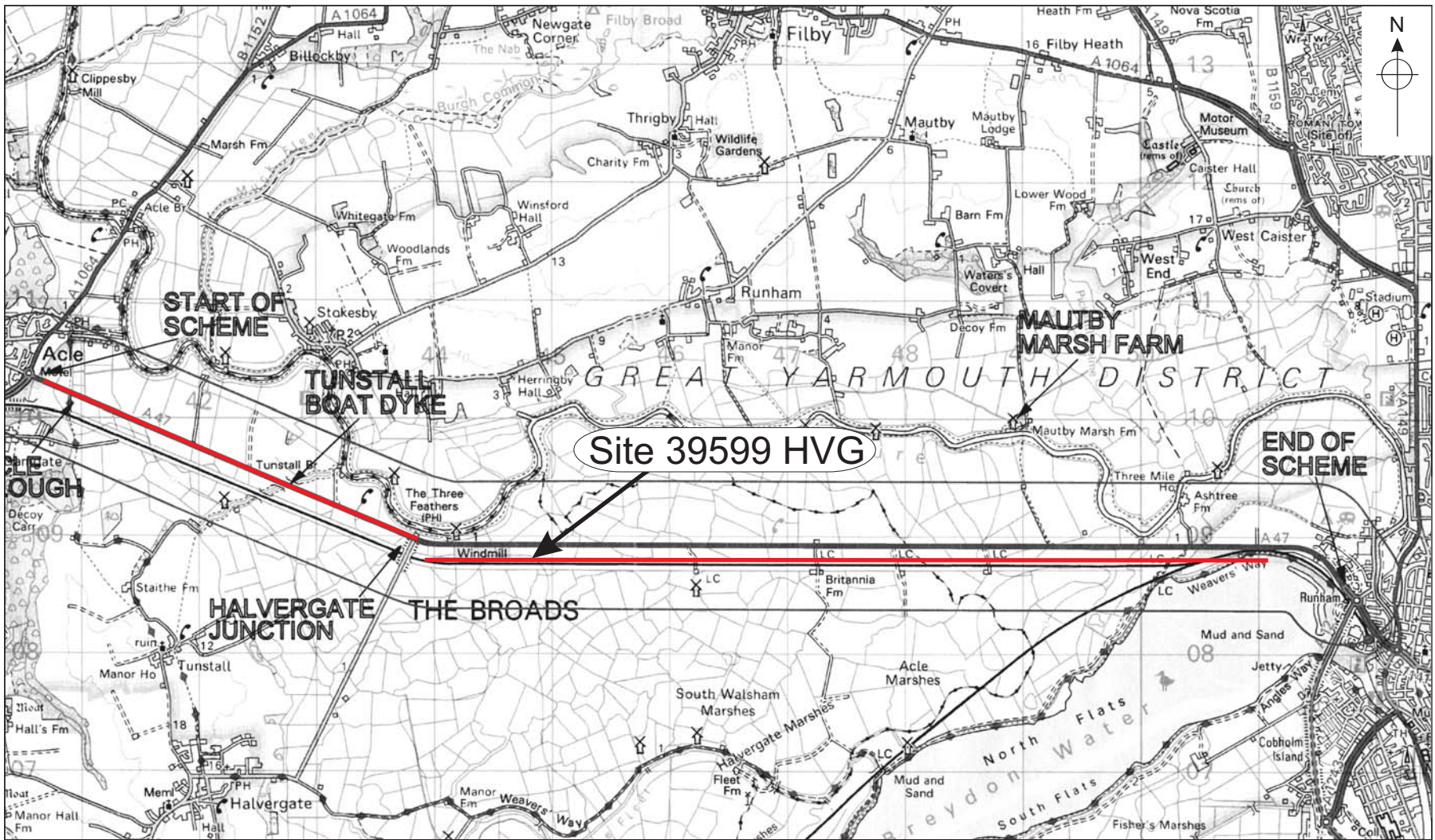


Figure 1. Site Location. Scale 1:50,000

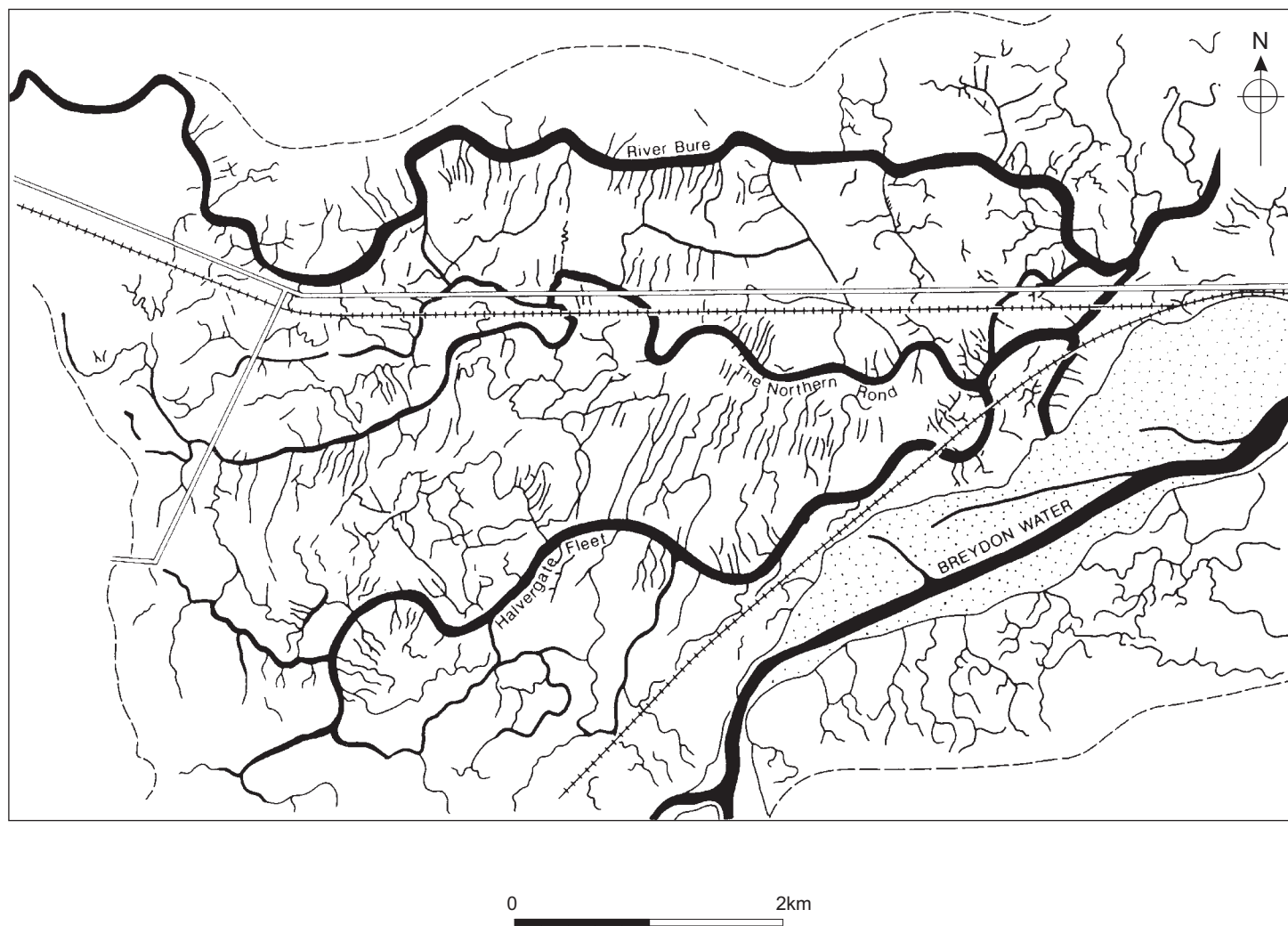
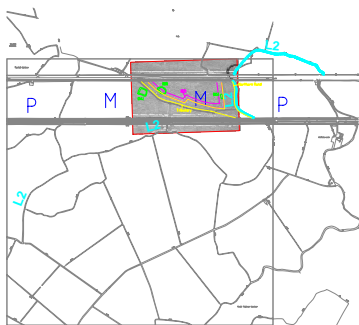


Figure 5. The Northern Rond in the context of the walkover survey. Scale 1:50,000







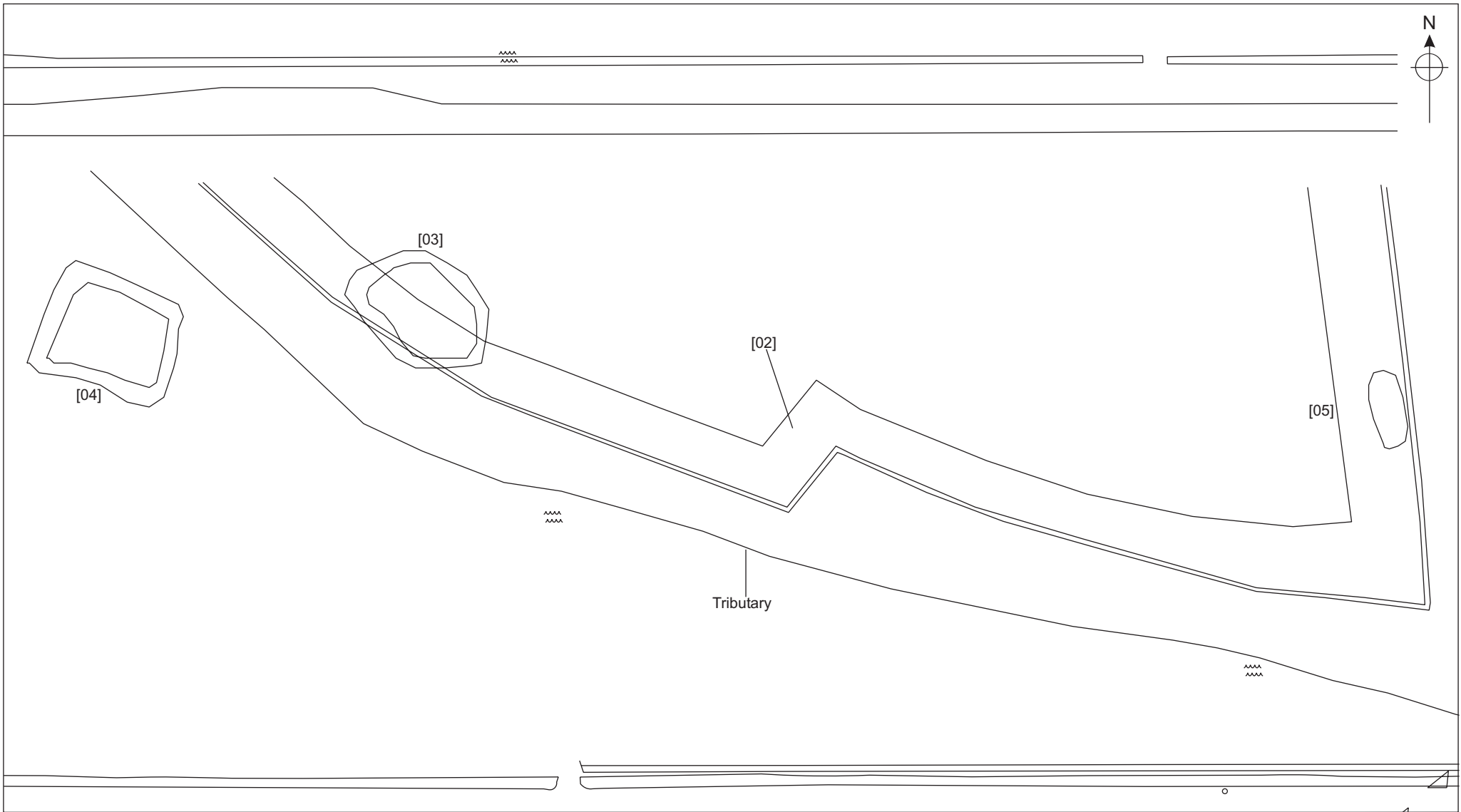


Figure 6. Plan of earthworks [02], [03], [04] and [05] (plotted from aerial photograph, located on Figure 3). Scale 1:1250

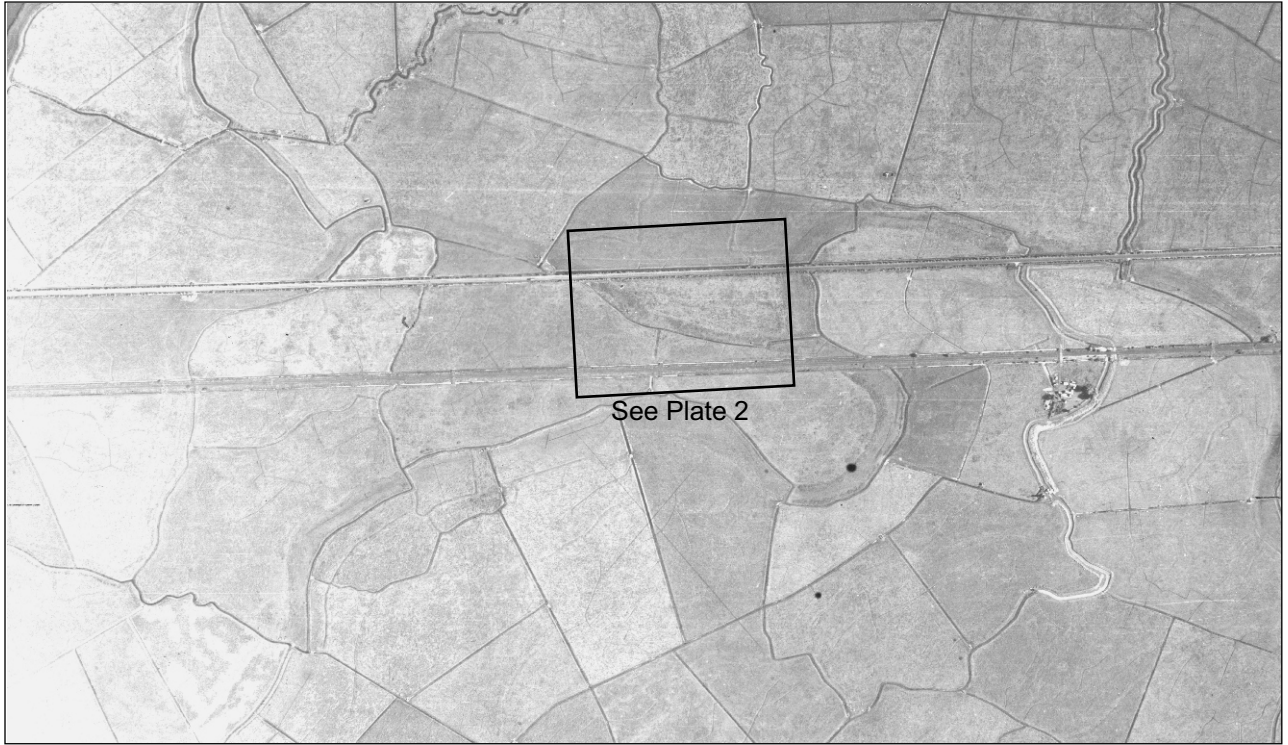


Plate 1. Earthworks [02], [03], [04] and [05] in relation to the Northern Rond



Plate 2. Levee [02], and earthworks [03], [04] and [05]