

HISTORIC BUILDING RECORD

SCCAS REPORT No. 2009/171

SKEPPERS MILL, OULTON MARSH OUL 003

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HER Information

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Disclaimer

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Appendix

Suffolk County Council Monument – Full Report

Summary

The remains of Skeppers Mill, Oulton Marsh, Oulton, were recorded through digital photography and the construction of a scale plan using data from a measured sketch.

Skeppers Mill was a simple trestle type wind pump of probable early 19th century origin. The actual mill structure was primarily of timber and had been removed sometime in antiquity although the extant remains of some of the supporting brickwork survived. This consisted of three brick columns, which presumably supported the main structure of the mill, and two further blocks of brickwork probably related to a scoop wheel for raising the water but which may also have supported the mill.

1. Introduction

The Suffolk County Council Archaeological Service was commissioned to undertake a basic record of the remains of a mill known as 'Skeppers Mill' in advance of works associated with the Broadland Flood Alleviation Project.

The mill site is located within Oulton Marsh in the parish of Oulton, Suffolk. The National Grid Reference for the centre of the site is TM 5019 9363 (Fig. 1). It is situated on the eastern bank of Oulton Dyke, a channel connecting the River Waveney to the north with Oulton Broad to the south. This channel provides a route from the Waveney out to the North Sea via Oulton Broad and Lake Lothing.

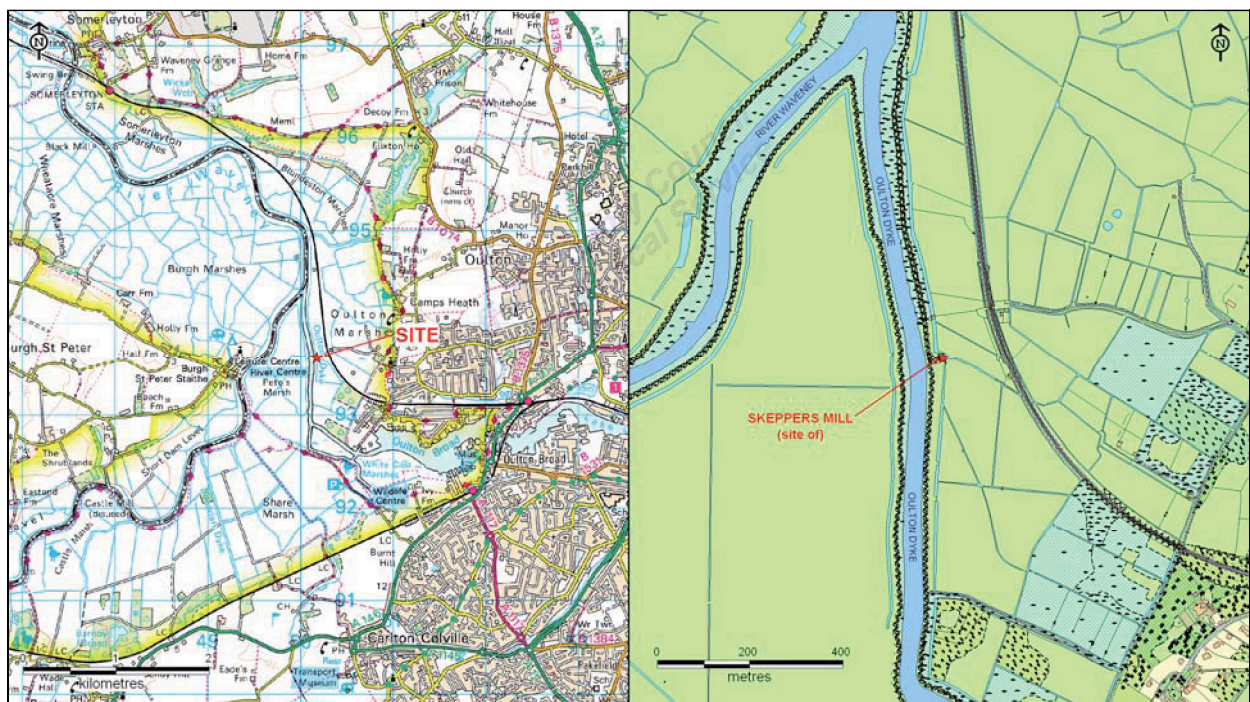


Figure 1. Site location plan

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The mill was built in this location in order to pump water from the drainage ditches running across the adjacent pasture into Oulton Dyke. The pasture has been reclaimed from former marshland and due to shrinkage is now lower than the water level in the adjacent channel. To prevent flooding earthen banks are placed along both edges of the channel and consequently any water drained from the former marsh needs to be pumped up to the river level. The mill here was one of many such pumping mills located in this area of Suffolk and the adjacent county of Norfolk.

The presence of a mill at this location is known from documentary evidence, primarily early mapping of the area, and from previous observation of the scant remains (Dolman 1978). It is recorded on the County Historic Environment Record (HER) under the reference OUL 003 (Appendix I).

A summary of this survey is recorded on OASIS, the online database, under the reference: suffolkc1-60534, where a pdf version of this report is also available.

2. Geology and topography

The site is located alongside Oulton Dyke, which is believed to be a man-made channel, in pasture which has been created from reclaimed marshland within the River Waveney flood plain. The surface geology comprises river silt deposits with occasional peat beds.

3. Archaeological and historical background

Skeppers Mill is recorded as a site on the County HER as it has been suggested as the location of a simple wind pump. The actual mill structure was likely to have been primarily of timber and had been removed sometime in antiquity although the extant remains of some of the supporting brickwork were noted as being *in situ* in the late 1970s (Dolman 1978 and Flint 1979). It probably dated from the early 19th century and was built to help drain the adjacent marshland in order to create usable pasture.

4. Methodology

The recording was achieved through digital photography using a 10 megapixel camera. Photographs were taken of the general layout of the mill area and each of the individual blocks of brickwork. A 1m scale divided into 0.5m red and white sections was used in some of the individual component photographs. Unedited copies of these photographs will be held in the SCCAS photo archive.

A measured sketch plan of the layout of the brickwork was also created and measurements of each block of brickwork were taken. This data was then used to produce a scale plan of the mill remains.

5. Results

The site was visited on the 15th May 2009 in order to record the remains of the mill. The site was located and found to be heavily overgrown with grasses and nettles up c. 1m high although these were easily laid flat by repeatedly walking across the site. The mill remains comprised five separate blocks of brickwork sitting astride the eastern end of a low raised earthwork measuring approximately 15m north-south and 25m east-west (Fig. 2).

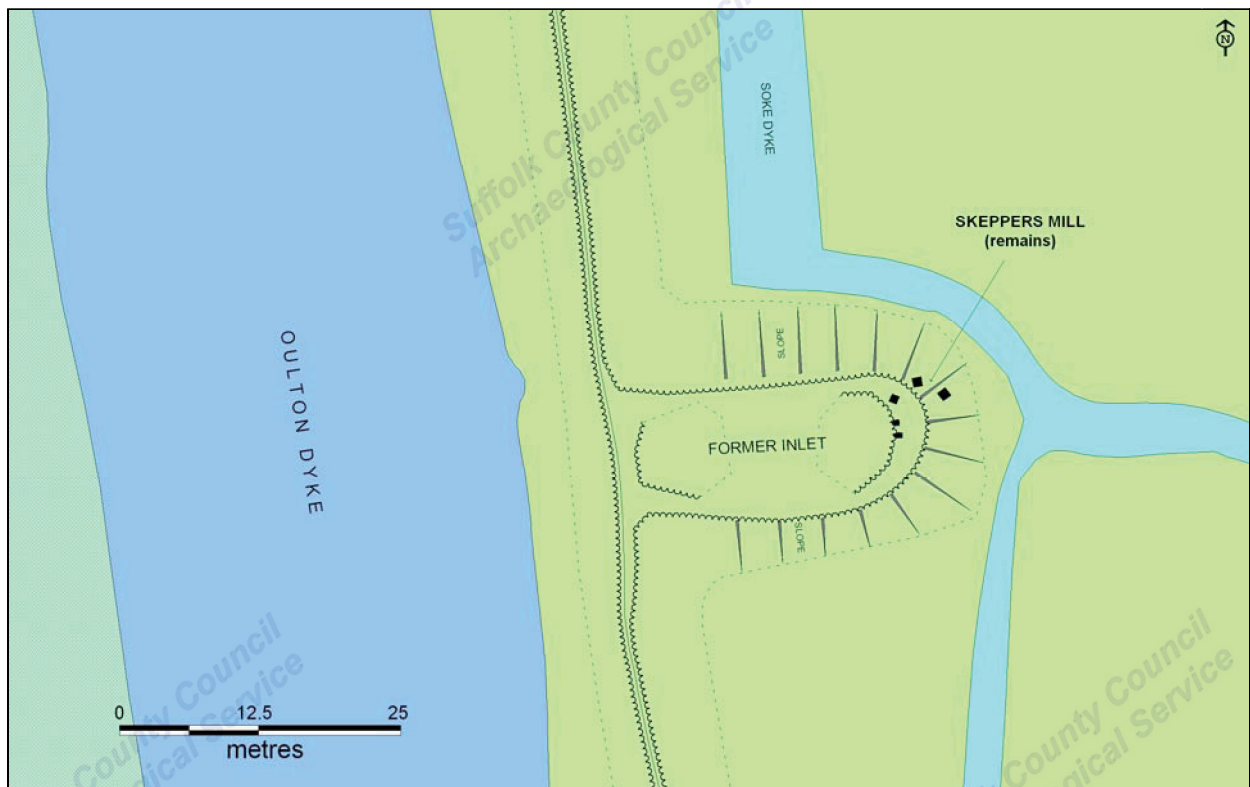


Figure 2. General layout of the mill site

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A total of thirty-nine digital photographs were taken of the mill remains and its general setting, of which thirteen have been reproduced in this report (Plates 1-13). Unedited copies of all the photographs taken are held in the SCCAS photo archive under the references GBS 34 to GBS 73.

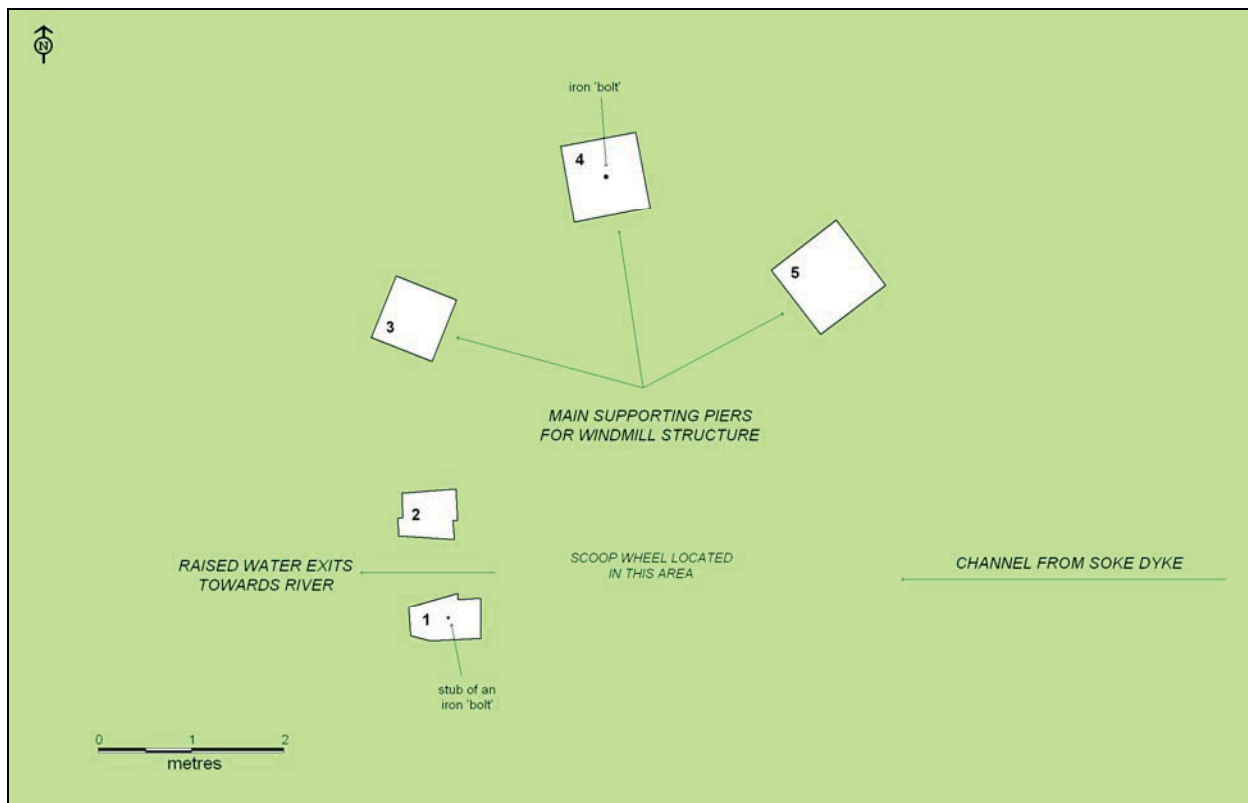


Figure 3. Plan of the mill remains

A measured sketch of the remains was drawn at the time of the survey and this has since been used to create a scale plan (figure 3). In figure 3 each of the individual blocks of brickwork has been arbitrarily numbered to enable each to be identified in the descriptions below. The writing in italics represents likely interpretation of the various components.

The five surviving components of the mill are described as follows:

- 1 An irregular-shaped block of brickwork measuring 0.77m by 0.52m (Plates 5 and 6). Five courses of brickwork could be seen giving it a measured height of 0.36m. The brickwork stepped in by c. 20mm on all but the northern face which is smooth. It is constructed of a hard grey bricks although one or two fragments of red brick could be seen, with a cement render on the southern and western faces. The broken off stub of an iron rod or bolt was visible on the upper face. A 60mm by 240mm recess is present in the northeast corner. Not conclusive as to whether the upper face supported further brickwork or is a finished surface.

- 2 An irregular-shaped block of brickwork constructed of a hard grey brick with occasional reds. It measured 0.57m by 0.53m at the eastern end, reducing to 0.47m to the west (Plate 7) and stands six courses high giving it a height of 0.45m. The brickwork steps in with each subsequent course by c. 20mm except on the southern face which is smooth. A 50mm by 190mm recess is visible in the southeast corner. The upper face is rough suggesting further courses of brickwork were once present.
- 3 A 0.70m square block of brickwork standing five courses tall giving it a height of 0.54m (Plate 8). Each subsequent course of brickwork steps in by c. 20mm. The upper face is rough suggesting further courses of brickwork were once present. Constructed from hard grey brick.
- 4 A column of brickwork measuring 0.85m square at the base (Plate 9). It comprises 13 courses brickwork and stands 1m high. The lower courses consist of soft red bricks which are heavily eroded whilst the upper eight courses are constructed of a much harder wearing grey brick. The edges of the first six courses are flush but the upper eight courses step in on each side so that the upper portion of the column tapers in to be 0.53m square at the top. The upper face appears to be a finished surface although a small number of bricks are missing on the northern side.

An iron rod or bolt is set vertically into the centre of the upper face (Plate 10). It measures 0.45m in height and is approximately 30mm in diameter at the base. The upper 100mm is reduced in thickness, being approximately 20mm in diameter. This narrower section was probably threaded although the entire surface of the rod is now heavily corroded. A 55mm square nut is screwed onto the very top of the rod.

- 5 A 0.87m square block of brickwork standing four courses tall giving it a height of 0.39m (Plate 11). Each subsequent course of brickwork steps in by c. 20mm. The upper face is rough suggesting further courses of brickwork were once present. Constructed from hard grey brick.

It was noted that two different types of brick had been used, a hard grey brick and a soft red brick. The hard greys measured 225mm by 105mm by 65mm (an average of two measured examples, maximum variation 2mm) and were frogged. The red bricks were 235mm by 110mm by 62mm (an average of two measured examples, maximum variation 3mm). No frogs were seen in the red bricks but their absence is not definite as it was not possible to examine all faces of any one brick.

The red bricks were very soft and prone to erosion as could be clearly seen where they had been used in block 4. In the other blocks where they were noted (1 and 2) they had been used internally and were therefore protected from erosion.

No other remains of the mill were identified although the area was heavily overgrown and despite walking and examining the immediate area it is possible that further remains could have been missed.

List of Plates

<i>Plate</i>	<i>Description</i>
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|----|---|
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| 3 | General view of mill site, camera facing west |
| 4 | View of mill site from soke dyke to the east, camera facing west |
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PLATES



Plate 1



Plate 2



Plate 3



Plate 4



Plate 5



Plate 6



Plate 7



Plate 8



Plate 9



Plate 10



Plate 11



Plate 12



Plate 13

6. Finds and Environmental Evidence

No finds or environmental samples were recovered during the survey.

7. Discussion

The recorded structural remains appear to be the remnants of a trestle type wind-powered pump. These are simple timber-framed machines mounting a small rotatable cap with wind-driven sails which in turn via a geared shaft would rotate a large wheel mounted on a horizontal axis, the outer edge of which would be fitted scoops. As the wheel rotated water would be captured in the scoops from a channel running from an adjacent soke dyke and raised up. As the wheel continued its turn the water would be tipped from the scoops, collected in a trough and allowed to run out into a nearby drain or river.

Plate 14, below, illustrates an extant example of a trestle mill which is located within the Norfolk Broads (believed to be Clayrack Drainage Mill, River Ant, Norfolk). Skeppers Mill is likely to have been of a similar design although the recorded remains indicate that they were not identical.



Plate 14: An extant example of a trestle mill

(source: www.norfolkbroads.com)

Figure 3 shows possible interpretations for the recorded components which are described as follows: Blocks 3, 4 and 5 provided the main support for the trestle whilst Blocks 1 and 2 were associated with the actual channelling of the raised water into Oulton Dyke. It is presumed that the scoop wheel was located to the east of Blocks 1 and 2. Block 4 represents a near complete example and that Blocks 3 and 5 would originally have been similar. The vertical iron rod set into the top of Block 4 would have securely held part of the trestle base.

It seems unlikely that these three blocks alone supported the trestle as one would expect a further support on the south side of the mill. The iron rod noted on the top of Block 1 could suggest that this block played some part in supporting the mill or alternatively a further support or supports may have existed that have since been buried or lost.

The recesses noted in the northeast corner of Block 1 and the southeast corner of Block 2 are aligned and it is probable that these held timberwork associated with the removal of the raised water or the mounting of the scoop wheel. The opposing faces of these two blocks are not stepped but are smooth and appear as an opening funnel which could have acted as the outfall from this mill with the water falling directly into a now filled inlet off Oulton Dyke.

From examination of the early Ordnance Survey maps it can be seen that what is probably this mill is marked on the 1st Edition 1:2500 scale survey of c. 1880. Figure 4 is an extract from the 1st Edition OS with some interpretive annotation. Flint and Dolman (1979 and 1978) state that the mill was present in 1835 and 1892 (presumably from map evidence) but was gone by 1903.

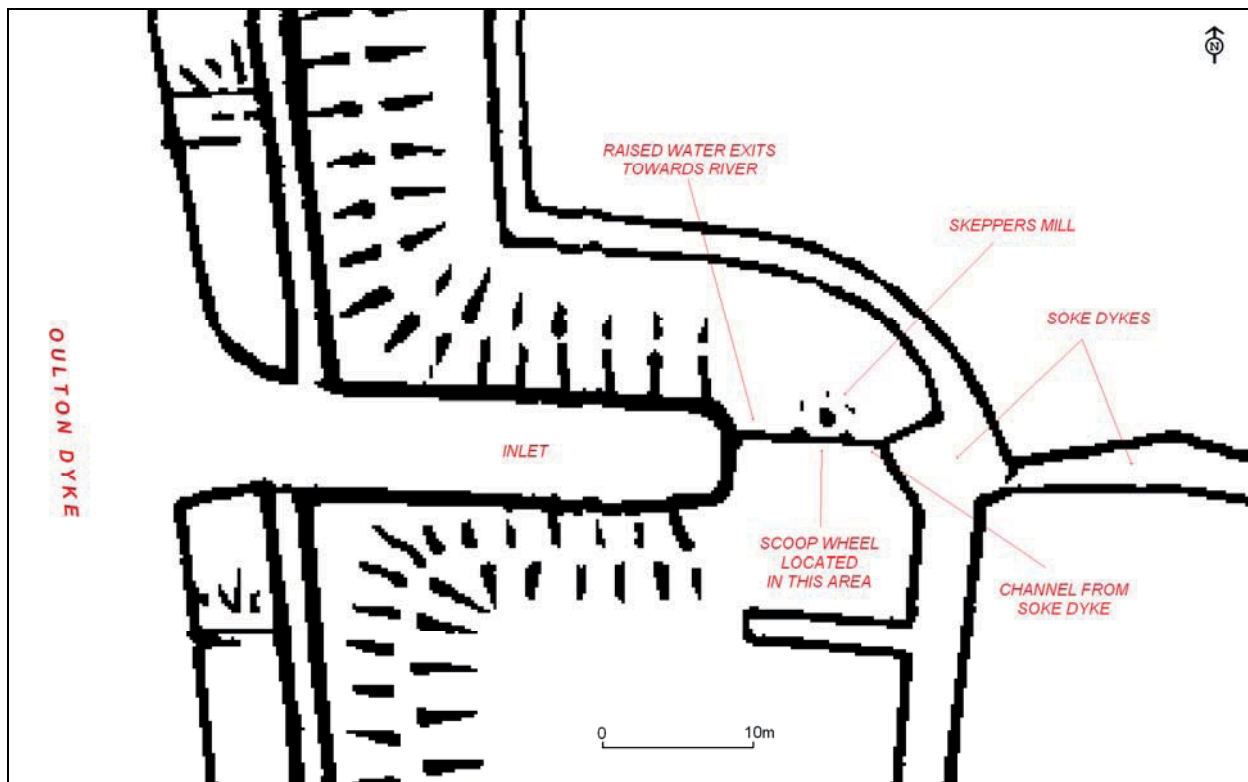


Figure 4. The Skeppers Mill site as recorded on the 1st Edition Ordnance Survey 1:2500 scale sheet (rescaled extract)

The mill appears as a series of six dots and an east-west line. The east to west line is likely to represent a channel from the soke dykes whilst the dots represent the mill itself. The large central blob is probably the main upright that held the sails whilst the three northern dots represent Blocks 3, 4 and 5. Two dots are apparent on the east west line, the western one of which may possibly represent Blocks 1 and 2.

In summary it would appear that the map shows a mill formed from a central upright surrounded by five supports alongside a channel from the soke dykes which is pumping water into the inlet off Oulton Dyke. The site of the mill is not noted and no name is marked which could suggest that it is out of use when the survey was undertaken.

These marks are absent for the 2nd Edition OS map of c. 1900 suggesting the main body of the structure had been removed, possibly for re-use as a mill elsewhere or just to recycle its components.

The mill name is probably a family name as it was noted that the surname, Skepper, appears on at least three gravestones in the local graveyard at St Martin's Church, all of which date from the early 19th century.

8. Conclusions and significance of the fieldwork

The recorded remains are those of trestle type wind pump, known as Skeppers Mill. These simple and relatively cheap to build wind pumps would have once been numerous in the Broads area but are now extremely rare with only two extant examples remaining of which only one is *in-situ*, the other having been dismantled and rebuilt on a nearby site. There have probably been many variations on the simple design which may not be reflected in contemporary records and it is only through the recording of such remains as those at the Skeppers Mill site that a deeper understanding of this mill type can be achieved.

9. Archive deposition

Paper and photographic archive is held on the SCC servers at Ipswich

Text + Map Data- T:\ENV\ARC\PARISH\Oulton\2009-171 Skeppers Mill

Photographic Data - T:\ENV\ARC\MSWORKS3\Digital photos\GBS

The paper archive (sketch plan and resultant scale plan) will eventually be deposited in the SCCAS office in Bury St Edmunds.

Finds and environmental archive: n/a

10. List of contributors and acknowledgements

The survey was carried out by M. Sommers of the Suffolk County Council Archaeological Service, Field Team.

The post-excavation was managed by M. Sommers who also carried out the production of the site plans. The report was checked by J. Newman.

11. Bibliography

- Dolman, P.C.J (1978) *Windmills in Suffolk, a contemporary survey*
Flint, B. (1979) *Suffolk Windmills*

Disclaimer

Any opinions expressed in this report about the need for further archaeological work are those of the Field Projects Team alone. Ultimately the need for further work will be determined by the Local Planning Authority and its Archaeological Advisors when a planning application is registered. Suffolk County Council's archaeological contracting services cannot accept responsibility for inconvenience caused to the clients should the Planning Authority take a different view to that expressed in the report.

