



WINDMILLS IN ESSEX

Comparative Survey Of Modern / Industrial Sites And Monuments No. 19

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WINDMILLS IN ESSEX

*An archaeological, architectural and historical appraisal of
medieval, post-medieval and industrial age windmills*

COMPARATIVE SURVEY OF MODERN / INDUSTRIAL SITES AND MONUMENTS

No. 19

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Report by Laura Belton and David Morgans

Historic Environment Record
Essex County Council
County Hall
Chelmsford
Essex CM1 1QH

Tel: 01245 437530

Fax: 01245 437213

heritage.conservation@essexcc.gov.uk

COMPARATIVE SURVEY OF MODERN / INDUSTRIAL SITES AND MONUMENTS IN ESSEX

The survey of standing and buried remains of the more recent architectural and archaeological heritage of Essex began in 1995. Copies of the survey reports are listed below and are available for public consultation at the Essex Historic Environment Record and the Essex Records Office.

Gould, S. 1996: **The Essex Malt Industry: History, Technology and Architecture.** Comparative Survey of Modern/Industrial Sites and Monuments No.1 (Essex County Council internal typescript report).

Thorpe, S. 1996: **Military Airfields in Essex During World War Two.** Comparative Survey of Modern/Industrial Sites and Monuments No.2 (Essex County Council internal typescript report).

Gibson, S. 1997: **The Essex Lime Industry.** Comparative Survey of Modern/Industrial Sites and Monuments No.3 (Essex County Council internal typescript report).

Kemble, J. 1997: **Historic Boundary Markers in Essex.** Comparative Survey of Modern/Industrial Sites and Monuments No.4 (Essex County Council internal typescript report).

Gould, S., Crosby, T. and Gibson, S. 1997: **Malthouses in Essex Volume Two.** Comparative Survey of Modern/Industrial Sites and Monuments No.5 (Essex County Council internal typescript report).

Garwood, A. 1997: **Iron Foundries in Essex.** Comparative Survey of Modern/Industrial Sites and Monuments No.6 (Essex County Council internal typescript report).

Doyle, T. 1997: **Fields of the First. A history of aircraft landing grounds in Essex used during the First World War.** Comparative Survey of Modern/Industrial Sites and Monuments No.7 (Forward Airfield Research Publishing).

Garratt, T. 1998: **Essex Poor Law Buildings: erected and utilised following the 1834 Poor Law Amendment Act.** Comparative Survey of Modern/Industrial Sites and Monuments No.8 (Essex County Council internal typescript report).

Garwood, A. 1999: **Essex Hospitals 1800-1948.** A Study of their History, Design and Architecture. Comparative Survey of Modern/Industrial Sites and Monuments No.9 (Essex County Council internal typescript report).

Cocroft, W. and Menuge, A. 2001: **Buildings of the Radio Electronics Industry in Essex.** Comparative Survey of Modern/Industrial Sites and Monuments No.10 (Royal Commission on the Historical Monuments of England typescript report).

Kemble, J., Gould, S., and Pratt, N.L. 2001: **The Chelmer and Blackwater Navigation and Conservation Area.** Comparative Survey of Modern/Industrial Sites and Monuments No.11 (Essex County Council internal typescript report - two volumes).

Crosby, T. 1999: **The Public Water Supply Industry in Essex 1850-1939.** Comparative Survey of Modern/Industrial Sites and Monuments No.12 (Essex County Council internal typescript report).

Crosby, T. 2001: **The Essex Textile Industry.** Comparative Survey of Modern/Industrial Sites and Monuments No.13 (Essex County Council internal typescript report).

Pratt, N.L. 2002: **Road Transport in Essex 1750-1900: a survey of tollhouses, milemarkers, and signposts.** Comparative Survey of Modern/Industrial Sites and Monuments No.14 (Essex County Council internal typescript report – two volumes).

Pratt, N.L. 2003: **Road Transport in Essex 1750-1900: a survey of Road bridges.** Comparative Survey of Modern/Industrial Sites and Monuments No.15 (Essex County Council internal typescript report).

Crosby, T. 2002: **The Essex Brewing Industry.** Comparative Survey of Modern/Industrial Sites and Monuments No.16 (Essex County Council internal typescript report).

Crosby, T., Garwood, A & Corder-Birch, A. 2006: **Industrial Housing in Essex.** Comparative Survey of Modern/Industrial Sites and Monuments No. 17 (Essex County Council internal typescript report).

Garwood, A. 2008: **Water and Steam Mills in Essex.** Comparative Survey of Modern/Industrial Sites and Monuments No. 18 (Essex County Council internal typescript report).

Belton, L and Morgans, D 2012: **Windmills in Essex.** Comparative Survey of Modern/Industrial Sites and Monuments No 19 (Essex County Council and Essex Windmills Trust)

**PROGRESS OF COMPARATIVE SURVEY OF MODERN/INDUSTRIAL
SITES & MONUMENTS IN ESSEX**

The following sets out the work to date and future programme. Themes are selected on the basis of perceived threat together with the expertise of the individual fieldworker. Where appropriate the larger categories will be sub-divided into smaller units so that they can be effectively tackled.

<u>LIST OF CATEGORIES</u>	<u>FIELDWORK</u>	<u>REPORT</u>	<u>HER ENHANCEMENT</u>
Extractive Industry			
Brick & Tile	UNDERWAY		
Cement	UNDERWAY		
Gravel			
Manufacture			
Iron	DONE	DONE	DONE
Textiles	DONE	DONE	DONE
Lime	DONE	DONE	DONE
Glass			
Pottery	UNDERWAY		
Leather	DONE	Underway	Underway
Salt			
Chemicals			
Explosives			
Electronics	DONE	DONE	DONE
Urban Industry			
Agriculture			
Food & Drink			
Malting	DONE	DONE	DONE
Brewing	DONE	DONE	DONE
Watermills	DONE	DONE	DONE
Windmills	DONE	DONE	DONE
Food Processing			
Public Utilities			
Water	DONE	DONE	DONE
Gas	Done	Underway	
Electricity			
Oil			
Nuclear Power			
Communications			
Road	DONE	DONE	DONE
Railway	UNDERWAY	UNDERWAY	Underway
River			
Canals	UNDERWAY		
Ports			
Aviation (military)	DONE	DONE	DONE
Aviation (civil)			
Bridges	DONE	DONE	DONE
Leisure & Recreation			
Public Buildings & Institutions			
Workhouses	DONE	DONE	DONE
Hospitals	DONE	DONE	DONE
Schools			
Prisons			
Religion			
Housing	DONE	DONE	DONE

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1 Introduction

This report details the results of a county-wide survey of post-medieval windmills and windmill mounds in Essex. The report was carried out by members of Essex County Councils Historic Environment Record team, as was funded by the Essex Heritage Trust. Windmills have an evocative presence in the Essex landscape, and over the last century writers and researchers have studied and documented them. This survey was undertaken to:

- i. To record and assess all standing windmills in Essex and provide, where appropriate, descriptions of their associated buildings and structures.
- ii. To pull together a range of published and unpublished research on Essex windmills, together with current research, to provide a concise index of all standing windmills in Essex.
- iii. To look at how the existence of windmills in the Essex landscape has changed over the centuries, highlighting the need for protection and conservation.
- iv. To test how a re-examination of cropmark evidence can reveal traces of previously unknown windmills, some of which may date to the medieval period.

The overarching aim of the survey is to provide a context that will enable the value of the surviving windmills to be understood. For example if there were originally many windmills of a particular type, and only one or two remain, then these will be particularly valuable. This report will provide accurate baseline conservation advice and an informed framework for future management, through establishing priorities within the existing resource. It assesses existing statutory designations and provides a definitive list of the best examples in Essex (in terms of architectural and technological survival). Most windmills in Essex are listed; this should already ensure a sympathetic approach is taken to guard against unnecessary demolition or insensitive works. Although designation should be sufficient to preserve the historic, architectural and technological integrity of a windmill, it is also clear that in many cases the list descriptions, carried out over the last 20-30 years, may no longer accurately represent the current state of the building. In such cases the list descriptions and the Historic Environment Record (HER) need to be updated to provide accurate baseline information for future conservation advice.

This survey identifies the existence of remaining structures and associated structures on a particular site. The external character, features, architecture, history and in a few cases where internal access was available their technological standing was assessed. It also comments on completeness of the structure/s, group value, condition, present use and importance. The windmills, windmill sites and mill mounds were marked onto a current OS map extract. Due to the nature of the survey, not all windmills were inspected inside, therefore recommendations are made that current internal configurations should be inspected, assessed and/or studied in detail through PPS5 as and when they become the subject of a planning application or pre planning enquiry.

Another aim of this project is to use the Farries archive to test the interpretation of cropmark circles that have not yet been positively identified and could be either

windmills or another form of archaeology, such as ring barrows. The Farries archive is the most concise source of information on windmills in Essex. Farries visited each windmill site in Essex and conducted historical research on each standing and demolished windmill known to have existed in county. The results have been compiled into five volumes of work.

Documentary sources indicate a widespread and early adoption of windmills in Essex during the medieval period, but these sources give no indication of precise locations. Archaeological evidence can supply this information, through analysis of cropmarks, place-names and landscape research.

This report should not be considered as a complete list of all windmill sites and mill mounds in Essex. While the particular wealth of the Farries windmill archive was anticipated, the sheer number of demolished windmills in Essex was not. For reasons of expediency, only Volume 3 of the five Farries volumes was assessed in detail and all demolished windmill sites added to the EHER.

1.1 Layout of the Report

This report is divided into several sections.

Section 2 summarises the historic context of windmills on a national and local level from the medieval period to the post-medieval boom and collapse in the later nineteenth century. Section 3 considers the architectural characteristics, commonality of features and machinery. Section 4 discusses the cartographic and archive research, including the Farries volumes and the reinterpretation of cropmark evidence in identifying new windmill sites. Section 5 assesses the nature of cropmark evidence and excavations for furthering our understanding of early windmills. Section 6 discusses the criteria for statutory protection and Section 7 discusses the sites or structures of merit that have been recommended for listing or re-grading. Section 8 and 9 comprise of general discussions and conclusions, and Section 10 presents recommendations for future work.

An inventory is provided at the back of the report, containing information on all the sites and is grouped by district, type and where possible ordered numerically by the Essex Historic Environment Record (EHER) number. Each assessment sheet includes a description of the buildings, their archaeological potential, the site's significance, current statutory protection and future management strategy. Each site is also graded according to local, regional, national, major national or international importance. The textual information is supplemented by at least one photograph, a current map extract and if appropriate an early edition OS map.

2 Historic Context

The origin of windmills has been a topic for intense academic debate with some evidence for local development in England rather than a Middle Eastern origin as suggested by many writers. The circumstantial evidence suggests that the windmill appeared in England at the time of the Second Crusade in 1189, and the structural principles were soon being widely disseminated. The earliest reference to an Essex

windmill is in 1202-3. This is given in the Feet of Fines for Essex, describing the 'molendin' in 'vento' constructed on land in Anham which is now Henham in Uttlesford. This structure was certainly a post mill but of a simple type, certainly much smaller than the C18 Mountnessing (EHER 5343) and Finchingfield (EHER 29267) post mills which incorporate medieval carpentry techniques and timber engineering. The Domesday Book refers to thousands of mills, but there is no indication if they are wind or water powered. There are sixty documented references (Farries Vol.1, 103) to windmills in Essex for the period 1200-1350, for which the parish or manor are stated but the exact location is not known.



Figure 1 Illustration of the Luttrell Psalter dated 1338, showing an East Anglian windmill

Post mills were the earliest type of windmill to be constructed and appear in medieval manuscripts such as the Luttrell Psalter of 1336 (see Figure 1, above). The basic design and method of construction remained essentially unchanged for centuries, although gradually refinements were introduced to mechanisms, sails and means of operation particularly following the advent of the Industrial Revolution. Moore (2010) has considered at length the evolution of the early post mill with sails of no more than 5 metres in length into the larger post-medieval post mill. The methodology of construction remained unchanged for many centuries and was described in detail by Freese (1924). The design is believed to have progressed from an earth-fast post to a post secured in earth-mounted trestles, on which was mounted the body or buck which grew in scale as construction techniques improved.

Historic studies of milling and cereal production have established a clear ratio between numbers of mills and sizes of rural communities. Moore (2010) has shown the productivity of a single windmill to be on average 270 tonnes of wheat per set of millstones at a time when windmills were working at the peak of their efficiency. With consumption of flour and bread running at a fairly consistent 0.54 tonnes of flour per capita, the number of mills for the Essex population can be calculated. With a fixed number of sites for watermills in the County (around 80) it is possible to show that by 1300, with a medieval population expanding towards its peak of around 80,000 to 100,000, up to 50 new mills may have been needed for the processing of cereals into flour.

Historical evidence suggests that the first windmills were constructed by monastic and secular feudal landlords within a rigid framework of repression, with private or unauthorised private mills being abolished by court order. The climatic deterioration of the early fourteenth century followed by the Black Death of 1349 caused a drastic reduction in the population of Essex. Production of cereals fell and the scale of milling was correspondingly reduced with water and windmills falling into disrepair, perhaps leading to some of the earliest abandoned sites now represented by mill mounds. Nevertheless the best sites were often reused for mills at a later date. The population did not recover fully to its pre-1349 levels until after 1600 and the numbers of mills may have remained relatively static until this later period when mill numbers would have shown some increase. The production of corn continued to increase in spite of losses to pastoral farming and the encouragement of tillage remained an important part of mercantile policy under post-medieval governments. The life expectancy of early mills is difficult to gauge but early engravings and photographs of Essex mills show flimsily-built post mills, possibly with possession remaining in the hands of one family through several generations. However, the construction of windmills remained an expensive matter and from historical accounts would have been the work of local millwrights working with local carpentry concepts and to local, vernacular patterns and preferences. The money for mill construction was provided through estates or by local yeoman farmers. The post mills often served a whole village or a neighbourhood as commercial enterprises linked to local bakeries as at High Ongar (EHER 54574), Cottonbury at Belchamp St Paul (EHER 6871) and Bocking Church Street (EHER 28005).

Windmills had one serious advantage over watermills, especially on the tablelands and uplands away from the strongest flowing streams, and that was the ability to run regardless of drought or low water. It is estimated that a suitable wind could be guaranteed for 40% of the time. By the late medieval and modern period farmers and estates were using both watermills and windmills together. This applied in both rural communities such as Great Bardfield and in small towns, such as Sible Hedingham. In the larger towns such as Colchester, large numbers of windmills were maintained to process grain from the surrounding districts for shipment to London. The Chelmsford millers, Marriages, operated complexes of farms with water and windmill sites strung along the Chelmer valley into modern times.

With the emergence of the yeoman farmer and the consolidation of land holdings in the later medieval and post-Medieval period, the use of mills became less seasonal. Four categories of farmer were recognised by Smith (1766), suggesting significant differences in attitude towards sales of grain. These were:

- i. Poor farmers – On the edge of subsistence who sold their corn harvest before the end of the year or by the spring sowing
- ii. Farmers ‘in moderate circumstances’ – managing arable farms at a level beyond subsistence farming and who grew more corn than was needed to be sold to defray the cost of seed and rent. Surplus corn would be sold in May for the best prices.
- iii. Farmers ‘in good circumstances’ – Generally reserved some surplus stocks of grain wheat for sale at the best prices before the next harvest.

- iv. Rich farmers – In a position to keep the whole or the better part of the harvest throughout the year, to speculate on the markets, and to sell when they liked the price.

Hence, the milling and processing of cereal grains was determined as much by the price of grain and availability of commercial supplies as seasonal factors. Eventually a middleman, known variously as the corn brogger or corn factor, dominated grain markets well into the C19 with trading in corn on his own account. The corn factor would hold on to supplies of grain in periods of surplus in order to sell at the highest price when shortages occurred. The miller was therefore required to work around the year and not just immediately following the local grain harvest.

From 1552, Acts of Parliament restricted the activities of the middlemen requiring them to be licensed and the corn markets were regularised to ensure that all dealings were carried out in Corn Exchanges. These were located in all market towns where farmers, corn factors, millers and bakers and factors met and dealt in the commodity. The market days were closely prescribed and sales of corn on the farm were heavily discouraged. By the nineteenth century milling of grain had become a year round activity related to consumer demand for flour and the price that could be obtained from the finished product.

During the feudal period, the simple sequence of milling evolved in which after the harvest the local farmer or estate reeve made immediate arrangements with the miller for the processing of harvested cereals, with the peasant population required under feudal law to use mills as directed. Existing post mills such as Aythorpe Roding (EHER 37194), Great Bardfield (EHER 29420), and Ashdon (EHER 35475) are located amongst arable fields and may have been the locations of some of the very earliest feudal windmills of this type.

The numbers of post mills rose considerably in the post-medieval period. However, their working lives were short (perhaps no more than 150 years) as a result of their exposed locations to ensure they took advantage of prevailing winds. They were weakened by exposure, damaged by extreme weather and prone to fire risk especially after iron parts were incorporated in their structures during the eighteenth century. Progressive technical changes made the mills safer and more productive. Early mills housed a single set of millstones at the front of the mill powered directly from the windshaft but later ones incorporated a second set of stones, producing a 'head and tail' mill.

The tower and smock mill first appeared in Essex in the 18th century and rose to prominence in the 19th century with a continuing rise in price of corn maintained by various Corn Laws, especially that of 1815. During this long period corn growing was highly profitable and the period saw major investment in new technology, although post mills continued to be built. After 1846, the deregulation of corn prices gradually led to a fall in profitability of domestic corn growing and the eventual flood of cheap hard wheat imports from the Americas. Mill numbers in Essex reached a peak in 1830-1840 with 280 mills across the historic County, but after that peak numbers steadily declined.

There is considerable historical evidence that post mills were being replaced by more efficient higher capacity tower and smock mills fitted with larger numbers of stones, and in many instances also able to work with auxiliary steam power through external drives connected to the stone sets. The greater size of the tower mills enabled a much higher level of productivity, with sorting and sieving machines to sift the meal and grade according to customer requirements.

3 Architecture and Design of Essex Windmills

The architecture and machinery of Essex windmills has been described extensively by Farries, following on the preliminary surveys by Rex Wailes (1954), Donald Smith (1931) and John Booker (1970).

Windmill machinery is borrowed and adapted from the watermill. The huge gear or brakewheel (see Figure 1), the equivalent of the pit wheel in a watermill, revolves at the ideal angle of 15-20 degrees above the horizontal. Its bevel gear interfaces with the smaller wallower gear (see Figure 2) on the upright shaft to produce fast revolutions directly on to the great spur wheel and stone nuts, the principal rotating components powering the millstone sets.

Bevel gears in cast iron were introduced by Smeaton in the late 18th century following extensive trials and replaced primitive lantern gears for transmission of horizontal to vertical motion and enabling the development of efficient and powerful sets of gearing for tower and smock mills.

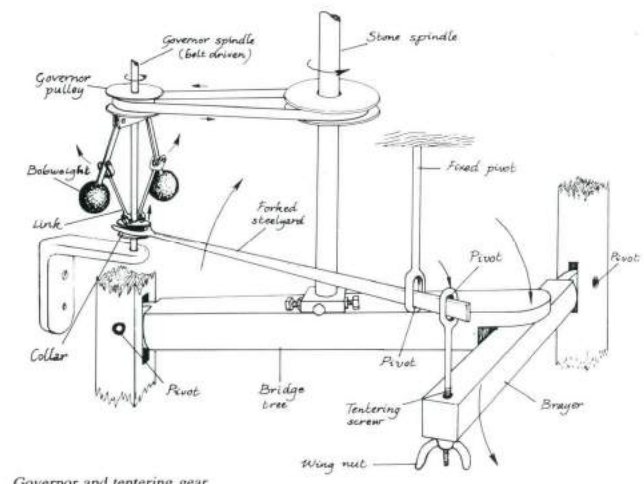
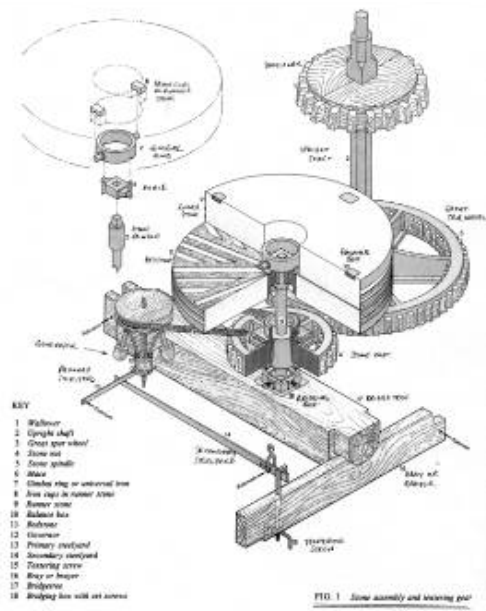


Figure 2 Illustration of the tentering gear

Figure 3 Illustration of a brake wheel and Wallower

The brake wheel was driven directly by the wind and increases could cause the stones to revolve too fast. As engineering science evolved this was controlled by the use of a governor to keep stones running at a constant speed. In addition, the tentering mechanism was developed to engage and disengage the stone nuts from the brake

wheel and also to control the brake wheel. The wooden rim brake was developed to allow the miller to stop and start the mill, and is one of a number of simple wooden or metal components regularly used by the miller.

3.1 Typology of Essex Post Mills

Post mills are constructed in two sections with the upper part, the body or buck, free to rotate to a degree, on top of a lower frame, or trestle. The heavy timber trestle consists of heavy timbers set at right angles, the cross bars, a heavy vertical post and a supporting framework. The lowest sections, the cross bars, rest on low plinths of brickwork but may formerly have rested either on the ground surface or buried within the mound.

The post consisted of a shaped and smoothed tree trunk which was mounted vertically on the cross bars, but supported by quarter bars mortised into both the cross bars and the post itself and which thus transferred the weight of the mill body, or buck, onto the feet. This basic design was subjected to very small variations, such as three cross-bars rather than two found occasionally on mills such as Moreton (EHER 4098, now destroyed). The cross bars maintained the post in a vertical position.

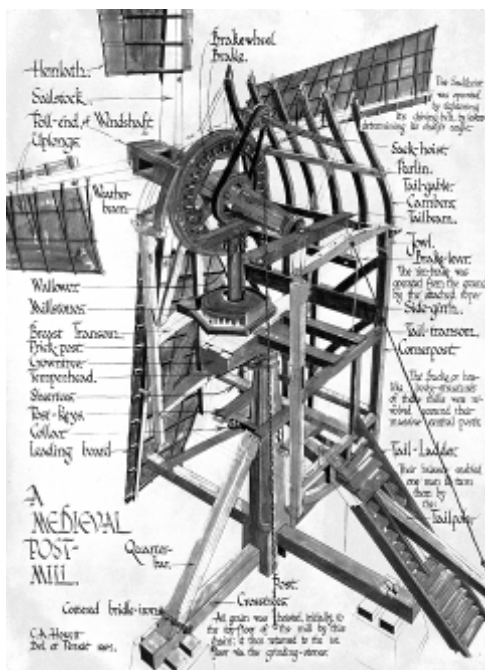


Figure 5 Illustration of the mechanics and Internal structure of a post-mill



Figure 4 Photograph of Mountnessing Post Mill

Above the quarter bars, the collar of timber separated the mill body or buck from the trestle. The design was simple but ingenious. At the upper end of a post, a pivot or gudgeon fitted the underside of a heavy timber beam, the crown tree, which supports the weight of the mill body timber frame which can weigh up to 14 tons. The body or buck contains the mill machinery and supports the sails. The frame is again of heavy timber and is generally externally protected with timber weatherboarding dressed to cast off precipitation. Mounted at the front of the buck, at

an angle of approximately 18 degrees for Essex, is the wind shaft, which carries the sail stock at its forward end, on which are mounted the sails.

Internal design relates to the vicissitudes of the building and of its owner. Being vernacular in construction, every mill was designed slightly differently according to what the buyer wanted. Considerable variations occur in the height of trestle (above the ground), size of buck and within the buck, on the number of sets of millstones. The critical invention in the evolution of the mill was the wind shaft; it was originally set horizontally, but evolved as practice determined to a regular 20 degrees above the horizontal for maximum efficiency.

The working area within an Essex post mill consisted generally of three floors. The lower floor provided a doorway access to the mill and from this level stretched down the long staircase that doubled as a chute for bags of grain. The level was below the crown tree and contained the tentering gear for adjusting the stones, as well as the crook string controlling grain flow into the shoe and the spouts for collecting the flour.

A short ladder provided access to the stone floor above. The weight of the mill stones was carried on the crown tree. Variations in design included head and tail mills, in which stone sets were carried at the front and back of the mill, and in the number and size of the stones. The smallest mills, such as Finchingfield (EHER 29267), would carry a pair of 2 ft 6 diameter stone sets whilst the larger ones like Aythorpe Roding (EHER 37194) would carry up to three 4 ft. 6 inch stone sets.

The design of the post mill facilitated winding the mill, turning the body of the mill so that it faced into the wind. This was done from earliest time using a heavy timber tail pole. Attached to this was a lever and chain enabling the stair case to be lifted from the ground whilst the mill was turned. Later, a few post mills were fitted with automatic tail fans that through wind power enabled the whole mill to revolve along a track, as at Aythorpe Roding (EHER 37194). Essentially post mills were primitive but effective machines. The technology was to give way during the Industrial Revolution period (1750 - 1850) to more sophisticated tower mills which had a greater capacity for corn grinding, greater storage capacity and which could be supplemented using steam power.

The base of the mill, the trestle supporting the body or buck is usually between five and six feet above the ground with the cross trees mounted on brick piers. No instances of stone piers were found, due to lack of local building stone. The crosstrees at Ashdon (EHER 35475) are in an earlier position just above ground level but this done for reasons of cost with low mounted post mills constructed as late as 1863. Evidence suggests that the cross-tree trestle began as a ground level structure possibly mounted on stone flags but in Essex this was unlikely unless on a high status monastic or lordly site. By the eighteenth century, trestles were being protected by brick built roundhouses which are in some cases the only parts of the post mill to survive.

The size of the buck may have increased with the availability of larger millstones. Little is known about the development of millstones before 1800 except that the very earliest 'cullin' millstones (volcanic lava from Cologne) are no more than 24 inches diameter compared to the later millstone sets such as French Burr stones, which could be up to

4ft 6 inches diameter. It is an area of future research which could be supported by the archaeological record.

3.2 Typology of Smock and Tower Mills

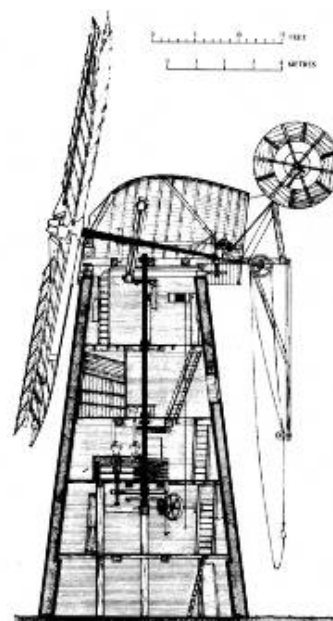
Whilst the post mill may have been an English invention, the engineering of the smock and tower mills is derived from Dutch models where the mill with the rotating cap had been in use since the sixteenth century. It is a response to the need for higher productivity and rising demand during a period of fast rising population and high profits.

Wheat products not only fed humans but also provided an important source of animal feed. Windmills with older technology such as simple sets of millstone grit Peak Stones, tended to concentrate on animal feeds and barley grinding, whilst the fewer modern tower and smock mills met the demand for bread and general bakery flour and this was increasingly the trend towards the end of the nineteenth century.

Salmon (1931) looked in detail at the influences of the design of Essex windmill and suggested influences from outside Essex largely affected the design and detailing of later smock and tower mills (see next section), whilst in mid-Essex he saw a predominance of post-mills in areas relatively remote from outside influences and progress. Salmon (1931) also suggested that the use of Edmund Lee's fantail, formerly commonly found in the north of the county around Colchester (e.g. Greenstead and West Mersea post mills) may have spread into Essex from Suffolk and Norfolk, where it was again a common feature.



Figure 6 Photograph of Stock Tower Mill



Stock tower mill.
FIG. 17 A. The mill in elevation

Figure 7 Illustration of the inside of Stock Tower Mill

3.3 Design of Smock and Tower Mills

Some of the early smock mills in Essex, such as Gibraltar Mill (EHER 29420), Great Bardfield (29420), and Mashbury Mill (EHER 1058), are clearly vernacular structures. They are of artisan construction dating from the very end of the post medieval period.

Tower and smock mill construction began in the 1770 – 1780 period with the construction of Messing (EHER 8199) and Baker Street (EHER 35154) and ended with the construction of Gainsford End, Toppesfield (EHER 28430) in 1869. These later mills are solidly constructed with brick bases and both brick or timber superstructures and incorporate machinery with a high proportion of cast iron. These are structures that depend for their engineering on technical innovations that occurred during the industrial revolution, incorporating new thinking and new technology applied to milling for the first time. Messing Maypole (EHER 8199), the largest and earliest tower mill in Essex, incorporated a fantail on the revolving curb which enabled the mill cap to face into the wind at all times, a feature which became common to all tower and smock mills.

Although smock mills consist of a timber superstructure over a brick base, they are essentially tower mills, carrying the motion and the machinery within the rotating cap. Unfortunately, smock mills were subject to decay and deterioration if not maintained, and few timber superstructures survive.

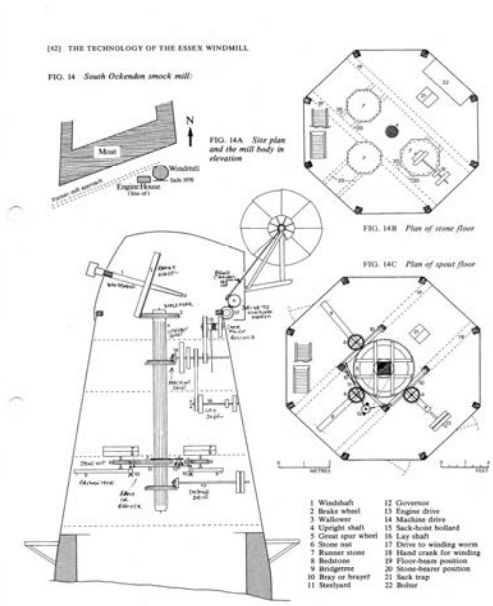


Figure 8 South Ockendon Smock Mill

Figure 9 Illustration of the interior of South Ockendon Smock Mill

Salmon (1931) pointed to the predominance of tower mills in north-west Essex and suggested that the majority were built on or near the sites of earlier post-mills by relatively wealthy land owners. Whitmore and Binyon, tower mill wrights operating in Uttlesford, introduced design elements such as the ogee cap with finials and cap balconies which were distinctive features of their Suffolk mills. By contrast, Salmon (1931) saw the adoption of the smock mill, in the south of the county particularly, as evidence of Kentish millwrights working in Essex, particularly as Upminster (formerly in Essex) and South Ockendon (EHER 5275, now demolished) carried the boat-shaped cap found on 80% of windmills in Kent. The boat shaped cap was also adopted in tower mill construction such as Stock (EHER 47634).

During the Industrial Revolution, Smeaton and others experimented with different numbers of sails but determined that four or five sails represented maximum efficiency. The development of the cast iron stock by Smeaton ensured a rigid frame for further developments, including the patent sail linkages that were run through the centre of the hollow cast iron wind shaft to enable the miller to open and shut the sails from within. The spring sail and patent sails are represented on most of the working windmills in Essex.

4 Documentary and Cartographic Research

4.1 Overview of *Essex Windmills, Millers and Millwrights* by Kenneth G Farries

During the 1930s and 1950s the number of popular articles written about windmills grew as the number of windmills scattered across the countryside started to disappear in a steady and noticeable fashion. The most concise source of information on windmills in Essex is the five volumes of work compiled by Kenneth G. Farries, collected from 1969-76. Farries' lifelong interest in windmills led him to correspond with other mill enthusiasts such as G.W. Martin (1964) and with their assistance compile an inventory of windmills that had existed in Essex from 1700 onwards. The volumes are arranged by District and Parish, containing both technical and historical information, grid references and photographs for each site. Farries visited each site where a post-1700 windmill is recorded to have stood and described any evidence of a windmill that might survive, such as a miller's cottage or roundhouse. Not only did Farries' work identify and describe windmill sites in Essex, it also helped to analyse the nature of milling in Essex by assessing the rise and fall of different types of windmill, this is discussed in the previous section.

An archive of Farries' unpublished material and notes are located in the Essex Records Office. As part of this project, the archive was studied to see if there was any information held within it that might have been useful to the project (see Appendix 2 for details). Fourteen boxes of archive materials including records of millers, detailed descriptions of individual mills and map records were assessed. In addition, several boxes contained other material such as photographs of each mill and charts of graphical analyses showing distribution, appearances and losses; presumably from his work as a geography teacher. There is certainly a lot of useful information held in the Farries archive, but for the purposes of this project the published volumes were adequate.

The wealth of information in Farries' published work has the potential to widen the scope of research into windmills. Given the large number of windmills recorded in each volume of Farries work, Volume 3 (1984) was used as a sample to carry out the following analysis:

- i. To assess HER coverage of windmills in Essex by checking whether each site listed in Volume 3 was entered on it. As a result of this research, new windmill sites were added to the HER, mapped and the source record was added to all windmill sites.

- ii. Windmill sites that are extant in Farries Volume 3 were assessed to see if there were any modern alterations, and how their condition changed.
- iii. To assess the potential of using Farries archive to reinterpret cropmark sites that could not be positively identified by comparing historic Ordnance Survey maps with cropmark plots.
- iv. Assess a small selection of aerial photos where the interpretation is 'unknown' to see if a windmill had been recorded on the site in Farries Volume 3.

4.2 Results of documentary and cartographic research

Each site in Farries Volume 3 (1984) was checked to see if it was already on the HER and added if it was not. All records were checked to ensure that they had the correct source information and the relevant description in Farries. In Farries Volume 3 (1984), there are 95 recorded windmill sites; only 50 of these were previously on the HER (see Figure 10, below).

Each of the 11 windmill sites that were recorded as having some structural evidence in Farries (1984) still have some structural evidence surviving today. Six are Grade II listed buildings and a further eight have either cropmark evidence or have a surviving mill mound. Over 80% of the demolished windmills recorded in Farries Volume 3 were not on the HER and have now been added. Before this project started, the HER had 281 windmill sites, there are now 389 known sites.

Only four sites listed in Volume 3 could not be properly identified and were therefore not given HER numbers. As it was common for two windmills to have existed at each site, it is not always clear whether one succeeded the other or if they were working at the same time. At Bradfield in Tendring (EHER 3205), a pair of post mills are said to have stood about 400 yards south-west of the church. There is evidence that some post medieval windmill sites started out as medieval windmills. At Berden in Uttlesford (EHER 47451), Farries recorded that two mills existed on the site. The first mill was of unknown type; it was drawn on a map dated to c1624 and appears to be a post mill. The site may have had a mill which has references dating to 1425. At Bradwell on Sea in Maldon the site of a windmill (EHER 12101) was shown on the Chapman and Andre map of 1777, and was burnt down about 1900. Documents about mill and millers (Farries, 1984) state that a mill had stood on this site for many centuries and indicate that is possibly the site of medieval windmill mound known to have existed in 1377, which was, 'in bad condition and of no value'. The first reference to a windmill in Bocking (EHER 6231) dates to 1405, and evidence suggests that it was also moved from its original location. Moving windmills was not uncommon and in some cases they were moved considerable distances. At Clavering in Uttlesford, two windmill sites were just 200m apart and known as North Mill (EHER 35729) and South Mill (EHER 35727). In such cases, it is not always possible to identify the original location of the windmill.

Windmills Identified in Farries, 'Essex Windmills, Millers and Millwrights' Volume 3

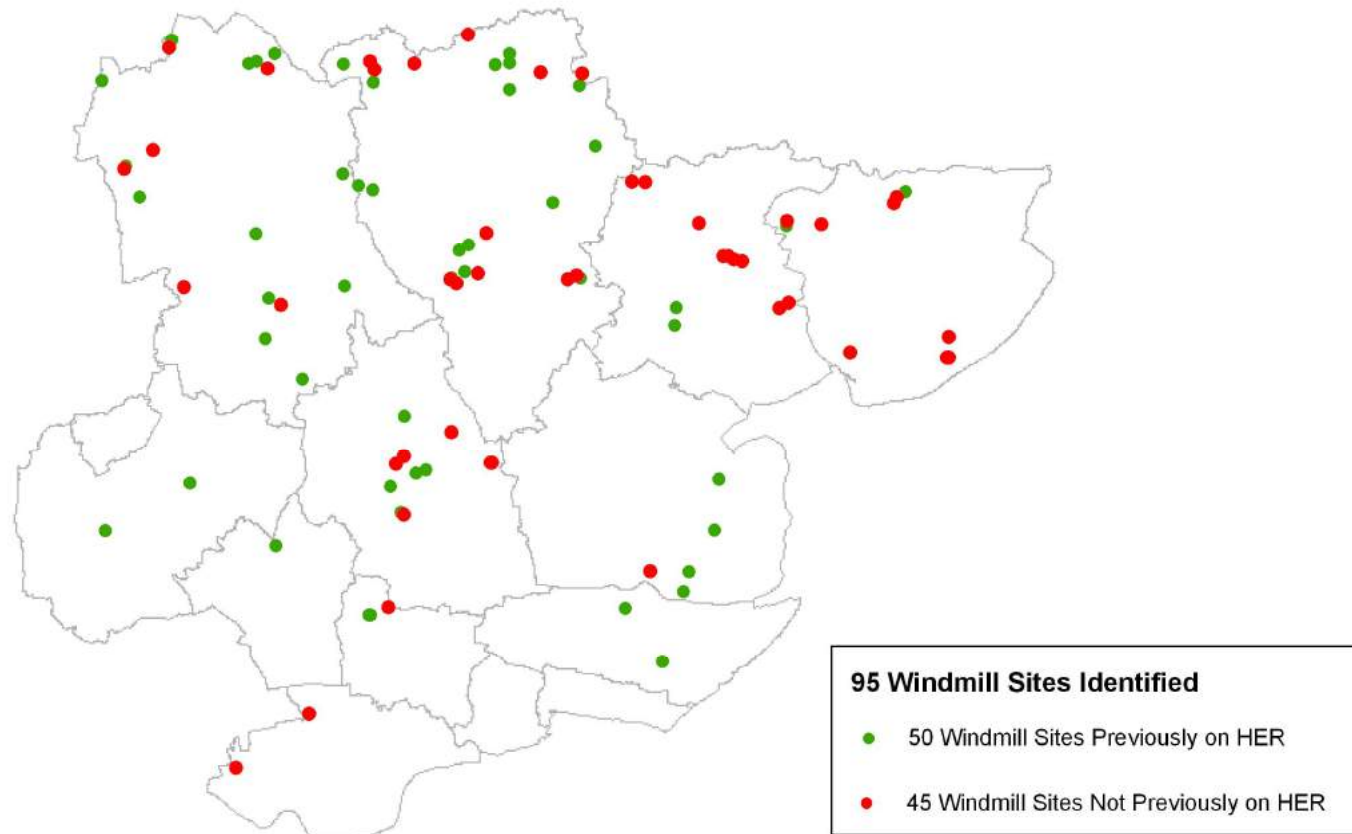


Figure 10 Map showing windmill identified through assessment of Farries Volume 3

5 Archaeological Evidence for Windmills

Assessment of the Farries volumes demonstrates that many historically recorded, post-medieval windmill sites cannot be identified in the landscape. Given the temporary nature of some post-medieval windmills, with structures being moved from place to place and the fact that many were small scale affairs with varying life spans, it is difficult to assess the number of windmills that stood in Essex at any time after 1700. Farries (Vol. 3, 1984) records that fourteen windmills are known to have been moved from their original location, but there may be many more.

Likewise, there are very few positively identified medieval windmill sites in Essex. Documentary sources indicate a widespread and early adoption of windmills in Essex during the medieval period, but these sources give no indication of precise locations. The Domesday Book records 280 mill sites, but does not distinguish between watermills and windmills, or elaborate on their form.

This means that there is a great deal of with many circular cropmarks recorded as 'unknown' on the HER, which could represent windmills, barrows, ring ditches or something else. There are also 'mounds' which cannot be clearly identified as windmill mounds or mottes.

Archaeological investigation has the potential to help identify windmill sites through excavation, analysis of cropmarks, place-name evidence and landscape research. This will be explored in the following chapter.

5.1 Identifying Windmill Sites in the Landscape

Windmills had to be set on high ground to maximise their ability to catch the wind, and they also had to be accessible to the carts and packhorses bringing grain for milling or collecting flour. It would be expected that windmills would be located in close proximity to existing roads. Exposed hill tops were a common location for windmills, but they are also found within villages where high ground was available. The presence of a track way running towards the windmill can also be expected.

Where a location was particularly favourable, it was not uncommon for a series of windmills to have been erected on the same site over the centuries. Place names such as Mill Hill are often given to areas where a windmill was located, and can be used to identify the potential location of a demolished windmill.

Populations in the east of the County may have been well served by existing watermills, being close to the tributaries of coastal waters. Areas in the west, such as on the chalklands of the north west of the county, with less access to rivers and on elevated terrain were ideally located for windmills. At the confluence of the rivers Can and Chelmer in Chelmsford, watermills rather than windmills were used to produce flour. Within two miles, there were seven watermills and six windmills, but three windmills operated as junior partners to the older enterprises based on water power.

5.2 Excavated Windmill Sites in Essex

Eight windmill sites have been excavated in Essex, all dating to the medieval period. Pottery dates most sites to the 13th or 14th centuries, corresponding to a time when windmill construction was growing rapidly to feed the growing population.

EHER	Name	District	Period	Key Features
3092	Hall Farm, Little Bentley	Tendring	Medieval	<p>Cropmark site was excavated, revealing early medieval pottery.</p> <p>The diameter of ditch was 25m, and opposing entrances.</p> <p><i>(Brown and Germany, 2002).</i></p>
47449	Great Bentley	Tendring	Medieval	<p>Cropmark site was field walked and excavated. The diameter was 32m, with an entrance on the south side.</p> <p>One fragment of a mill stone was found with an assemblage of medieval pottery.</p> <p><i>(Brown and Germany, 2002).</i></p>
17912	Boreham Airfield	Chelmsford	Medieval	<p>A 12th to 13th century windmill was fully excavated as part of an enclosed medieval settlement. A circular pit had a diameter of 5m and 1m deep, surrounded by a wide ring-ditch with a diameter of 18m. A small drainage channel interrupted the ditch.</p> <p>Post-holes surrounded the ring-ditch, which may have contained the tail-pole.</p> <p><i>(Clarke, R. 2003)</i></p>
1625	Sturmer	Braintree	Medieval	<p>A pennanular cropmark enclosure with clear evidence of cross-trees and an entrance. The surrounding ditch was 0.36m diameter and 0.5m high and relatively ploughed out.</p> <p><i>(Priddy and Buckley, 1987).</i></p>
1331	Clobbs Wood	Uttlesford	Medieval	<p>Cross-trees measured 9-10m long. Foundation trench was over 1m deep. Timbers of the cross-trees were discovered in the cross-trees. A causeway led to the mill across the ditch.</p> <p>A mound was built around the central post to add further support to the central post.</p>

				A shallow, circular track partially surrounding the mill could have been caused by the process of turning the tail-pole to face the sails at the wind. <i>(Hardy, 2007).</i>
48066	Stansted Airport	Uttlesford	Medieval	The windmill was located on a substantial mound . Cross-trees of 8m long were visible; foundation trench was 0.30 -0.40m deep. Surrounding ditch was 4m and 5m wide and 1m deep. The diameter of the ditch was approximately 19m wide. <i>(Cooke and Phillpotts, 2008).</i>
13846	Mucking	Thurrock	Medieval	The site of a windmill was excavated as part of a wide scale excavation. The windmill was set within a number of buildings and structures. <i>(Clarke, 1993)</i>
1515	Thaxted	Uttlesford	Medieval	Excavations took place at the prominent mill mound. Pottery with a medieval and post medieval date were excavated, but there was no evidence for structures relating to the known post-medieval mill. The mill mound was constructed in one phase, probably during the late 17th or early 18th century. <i>(Network Archaeology, 2012)</i>

Table 1 Table showing excavated windmill sites in Essex

Both the Great Bentley and Little Bentley sites were field walked and excavated as part of the Cropmarks Enclosures Project, which investigated four circular cropmark enclosures, thought to be hengiform enclosures (Brown and Germany, 2002). This was tied into a wider, nationwide study to identify cropmarks based on their morphology. Both cropmarks were field walked and excavated, and produced pottery with an early medieval date. The archaeological evidence reflects Farries assertion of a 'widespread and early adoption of windmills in Essex' (Brown and Germany, 2002:50). Neither site revealed cross-trees; they may have been missed by the trial-trenching or it could be possible that in early medieval windmills, cross-trees were not sunk into the subsoil. At Great Bentley, Bronze Age material was retrieved from the lower fills of the ring ditch enclosure, suggesting reuse of an earlier mound.

The excavated windmill at Boreham airfield was discovered in association with an enclosed medieval settlement containing farm buildings. Given the absence of cross trees, it is assumed that the windmill was constructed with a massive timber-post embedded in a sunken pit and compacted with surrounding earth and clay. Two phases of construction were identified. The first involved the central post being set in marsh-clay, presumably to enhance preservation. During the second phase of construction, the post was placed on a post-pad of flint stones at a higher level than the previous post and the outer ditch was widened. The illustration below shows an artist's interpretation of the excavated evidence.

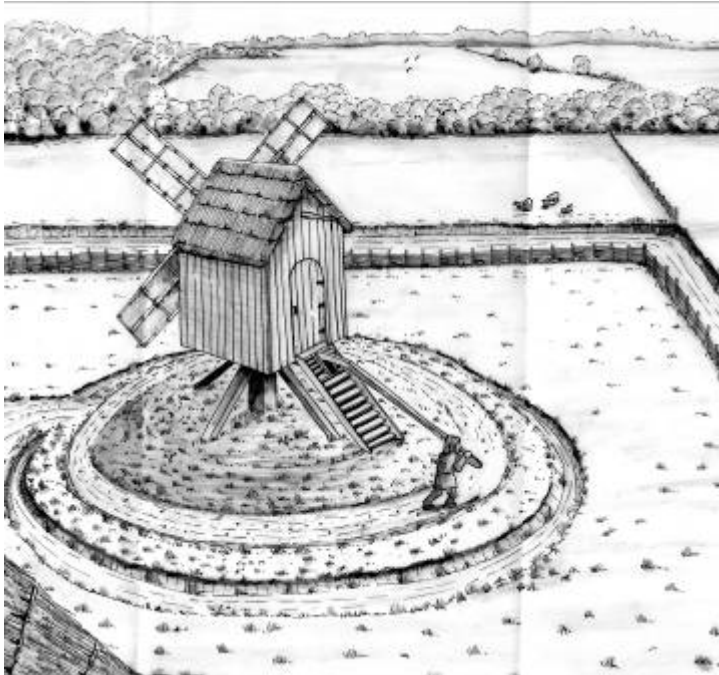


Figure 12 Artists impression of the windmill at Boreham

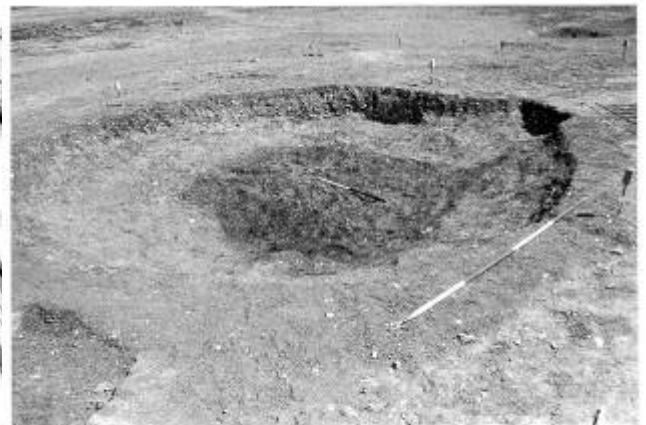


Plate V1 Windmill pit 200, partially excavated, showing darker deposits towards the base of the cut

Figure 11 Photograph showing excavated windmill at Boreham

At the three sites discussed above, neither aerial photography nor excavation revealed any indications of cross-trees. In contrast with the above sites, the excavated sites at Stansted, Clobbs Wood, Mucking and Sturmer revealed clear evidence for cross-trees.

At Stansted, the windmill site was excavated as part of the Stansted Project (Cooke and Phillpotts, 2008). The windmill was erected on a substantial mound which may have been a reused barrow. Earth dug from the surrounding ditch was used to further enhance the mound, adding stability and negating the need for deep foundation trenches. Pottery recovered indicated that it was built in the late 12th or early 13th centuries, and remained in use until the 14th century. The post-mill appears to have been built on an existing mound, overlooking the Princey Brook on high ground.

Clobbs Wood, Great Dunmow, was excavated by Oxford and Wessex Archaeology as part of the A120 road scheme (Hardy, 2007). The cropmarks at the site consisted of a circular enclosure of approximately 22m in diameter, with cross-trees in the centre. Excavation revealed deep cross tree foundations, with some timber from the cross-trees still in situ. It is thought that the mound surrounding the central post of the

windmill was a later addition, which would increase stability and promote airflow to the sails (Hardy, 167). This windmill appears to have been built for purpose, while the one at Stansted represents the reuse of an earlier, suitable site.

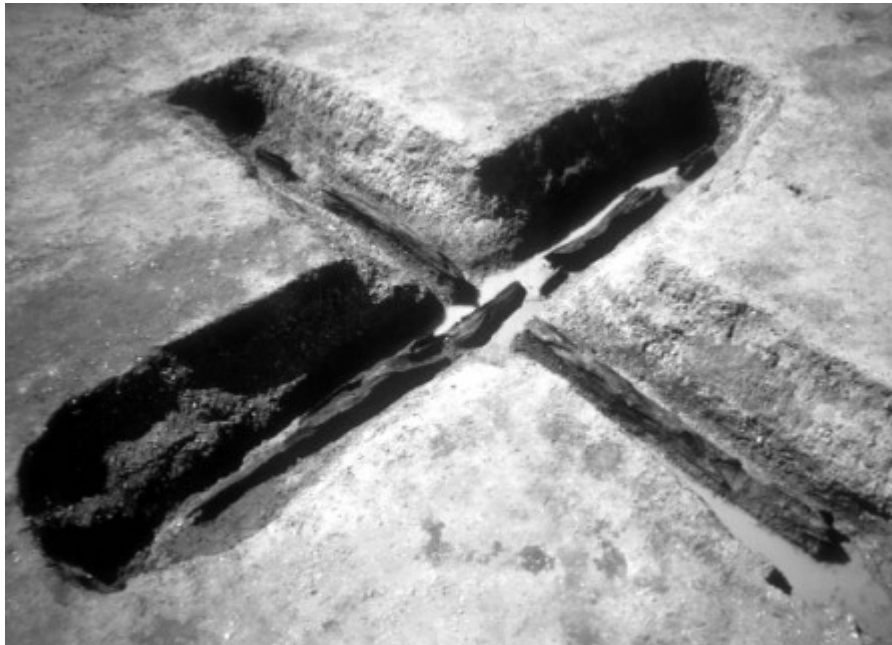


Figure 13 Excavated windmill at Clobbs Wood, Little Dunmow (EHER 1331) – Cross Trees were placed directly in the ground

Priddy and Buckley (1987) wrote that other cropmarks classified in the same group as the one at Sturmer, 'may prove to be moated mill mounds' (1987:72). The cropmark at Sturmer had evidence of a low mound, and clear evidence of cross-trees. It was close to another large circular cropmark, showing that a complex of cropmarks does not necessarily rule out the presence of a windmill. At Mucking, the excavated windmill site was set within a number of buildings and structures, which proved to be of late medieval/early post-medieval date. The collection of prehistoric tools found on the site during fieldwalking could mean that the windmill was erected on the site of an earlier structure, due to its functional location and morphology.

At Thaxted (EHER 1515), excavation from the top quarter of the mound produced a large selection of medieval pottery, c. C12-13. Although a post mill is known to have existed on the site in the post-medieval period, excavation of lower layers of the mound failed to reveal any indication of cross-trees (Network Archaeology, 2012). It was thought that a medieval windmill may have existed on the site, but no evidence was found during excavation, but pottery of 12th to 13th century has recently been recovered from the site during tree clearance works.

Interpretation of mounds and ring-ditches as windmill sites or prehistoric sites is difficult. Even excavation does not always give a clear identification, as some sites were reused from the prehistoric period onwards. One of the main indicators of a post-mill cropmark is the presence of a 'cross-tree'. The nature of post-mill structures, supported on a single post with sails on top, meant that they were often unstable and vulnerable to collapsing in strong winds. In order to ensure the windmill was secure, a

large pair of cross-beams (the cross-tree) were often sunk into deep foundation trenches (see Figure 12, above) which were often stone lined.

Clarke (2003:76) explains the absence of cross-trees at Boreham as reflecting independent and regionalised technical development in early windmills. In Sweden, there are examples of post mills constructed in a sunken pit with a central post and no cross-trees. (Clarke 2003: 75).



Figure 14 Exposed section of the mill mound at Thaxted.

5.3 Cropmark morphology

Circular enclosures are one of the most common types of cropmark and can symbolise archaeology from the Neolithic period, c. 4000BC onwards. The Essex HER records a large number of cropmark sites that have been surveyed and classified via the National Mapping Programme, which mapped all archaeological sites visible on aerial photographs in Essex and across the country. Other Aerial Survey projects have also been completed in Essex.

Unless identification of a circular cropmark can be certain, they tend to be classified as 'unidentified' on the Historic Environment Record. Positively identifying windmills from cropmarks is fraught with difficulties. Priddy and Buckley (1987) published an assessment of excavated enclosures and selected cropmark sites, which aimed to assess the extent to which excavated sites can aid the interpretation of unexcavated cropmarks on the basis of morphology. Although form is often an indicator of date, it is unreliable as a guide to function. Furthermore, it stated that the circular enclosures were the only enclosure that could be readily classified by size and form. This theory was later contradicted by the Essex Cropmark Enclosures Project (Brown & Germany, 2002) which examined four examples of circular cropmark enclosures interpreted as Neolithic or Bronze Age monuments on the basis of their morphology. As discussed above, excavation showed that two were medieval windmills, a third cropmark was a large Bronze Age barrow and only one of the four to have been of Neolithic date.

5.4 Assessment of Some Essex Cropmarks

An assessment of Farries, Volume 3 along with cropmark evidence has led to a number of previously unidentified crop mark sites being reinterpreted as windmills.

While checking each windmill site on the Essex HER, circular cropmarks from nearby areas were checked to see if they could indicate a windmill site. In some cases, the cropmarks could be identified as windmills that were mentioned in Farries Volume 3. Some cropmarks that were not recorded in Farries were also identified, based on associated landscape features and site names such as Mill Hill. There were some cases where the cropmarks could not be identified and could have their origin in the prehistoric period.

EHER No.	Name	District	Probable Date
17326	Holland Brook	Tendring	Medieval
3186	North of Mill Green	Tendring	Medieval
13407	Cropmark at Helions Bumstead	Braintree	Medieval or Post Medieval
4492	Great Canfield Windmill	Uttlesford	Post Medieval
1050	High Roding	Uttlesford	Post Medieval
46547	Flatiron Spring	Uttlesford	Unknown
6258	Bocking-Mill Hill	Braintree	Post-medieval
4427	Hallingbury Park	Uttlesford	Post Medieval

Table 2 Table of cropmark sites assessed in detail

Three cropmarks in Tendring (EHER 17326, 3186 and 3092) were not recorded in Farries or on the historic maps, but excavation and field walking along with their morphology indicate that are likely to be early medieval windmills. Tall three are associated with a trackway running towards them, and they all have a defined entrance.

The flattened, moated mounds at High Roding (EHER 1050), Hallingbury Park (EHER 4427) and Bocking (EHER 6258) have not had any archaeological investigations, but the surrounding landscapes and associated features imply that they were once mill mounds. They each have cropmarks of trackways leading to the circular cropmark from nearby roads and are located on the outskirts of villages. High Roding and Bocking cropmarks are both located on sites marked as 'Mill Hill' on the historic maps. Hallingbury Park is unusual in that there is an almost identical cropmark adjacent to it; it could be that two windmills existed in the area. Or the cropmarks may represent something else in relation to the park in which they are situated. Three previously unidentified cropmark sites could be distinguished as windmill sites which were mentioned in Farries.

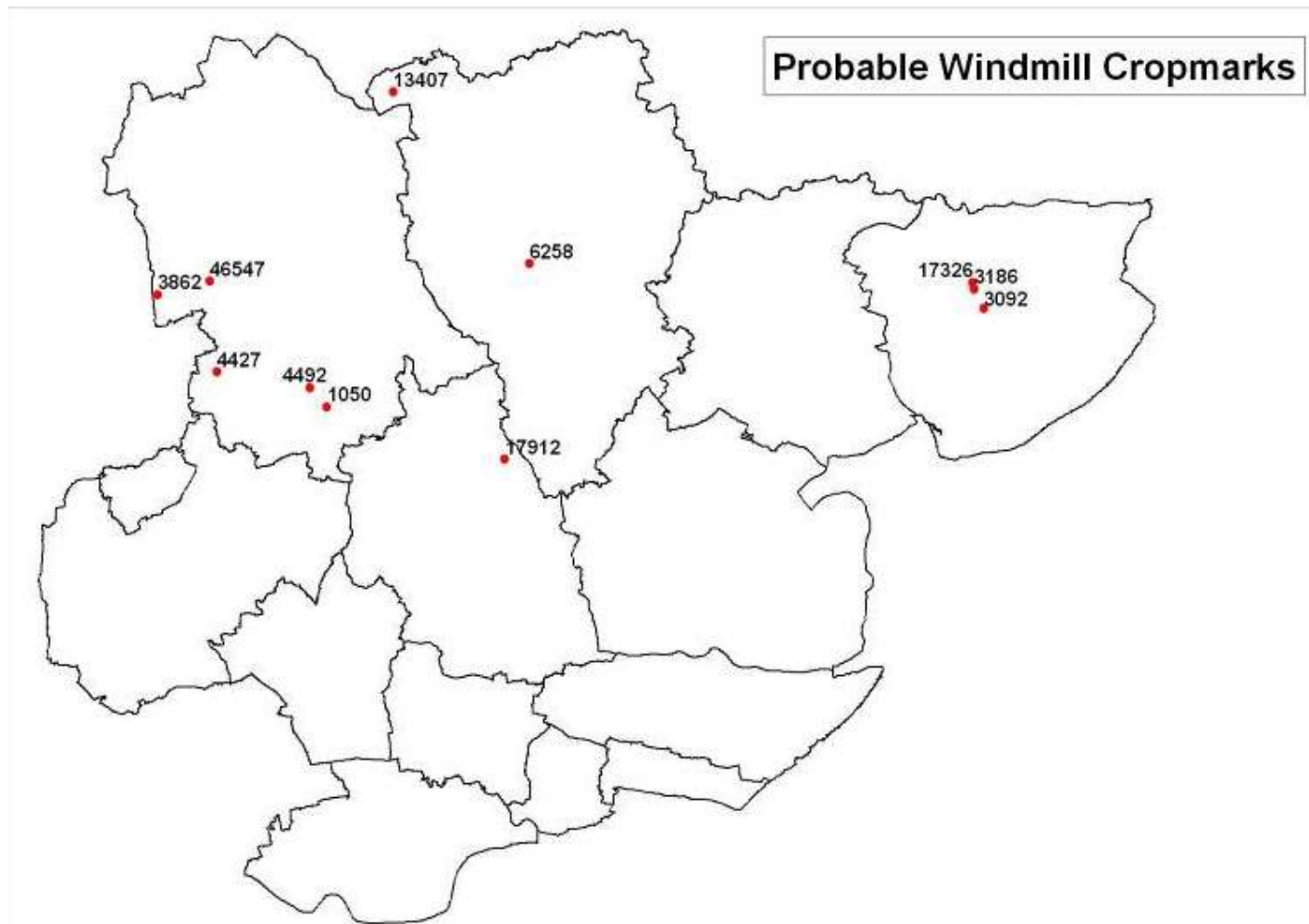


Figure 15 Map showing some probably windmill cropmark sites within the study area

Cropmark Name Holland Brook
EHER No. 17326
Location Little Bentley, Tendring

EHER Description:

An example of a circular cropmark where identification is not obvious. Cropmark of a widely ditched circular enclosure with a south easterly, terminally defined entrance. While the site may represent a hengiform monument, it is also possible that it represents a medieval post mill mound. Indeed the size shape and proximity to a brook is similar to the excavated example at Little Bentley (EHER 3092).

Associated Features: Situated on a field boundary/trackway shown on the 1st Edition OS map and has an entrance gap on the south west sector adjacent to trackway.

Landscape Setting: Close to field boundary and Holland Brook river, on the outskirts of the village.

Cartographic: Not shown on any historic mapping.

Recorded in Farries: No



Plate 1 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

Cropmark Name North of Mill Green
EHER No. 3186
Location Little Bentley, Tendring, Essex

EHER Description:

Cropmark of a sub-rectangular enclosure with an entrance to the SW, enclosing a pennanular ditch with a possible post mill setting (obscured by geology). This is to the NE of EHER 3185.

No mill was mapped a small rectangular enclosure was mapped and it was suggested that this might be a possible oval barrow.

Has an entrance gap on the north-west section adjacent to the trackway.

Associated Features: Located in a field with cropmarks of large irregular enclosure cut by boundary ditches.
Landscape Setting: On the northern outskirts of the village with an apparent trackway running towards the enclosure from Pump Farm.
Cartographic: Not shown on any of the historic maps.
Recorded in Farries: No

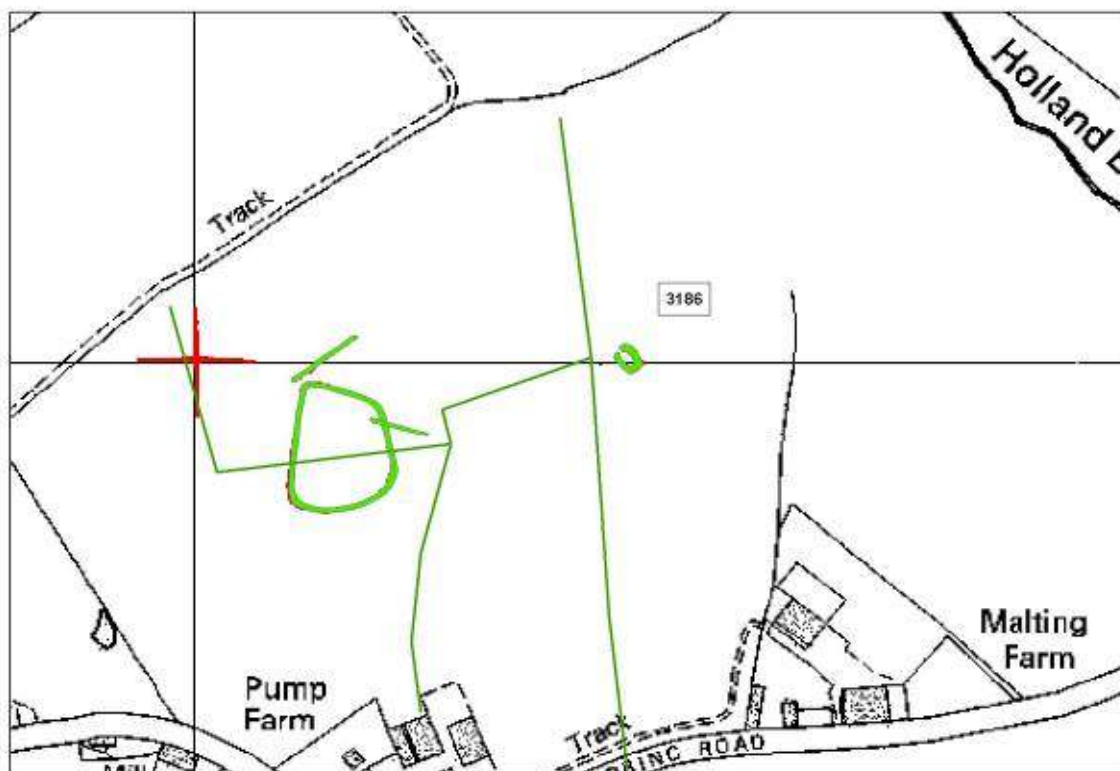


Plate 2 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

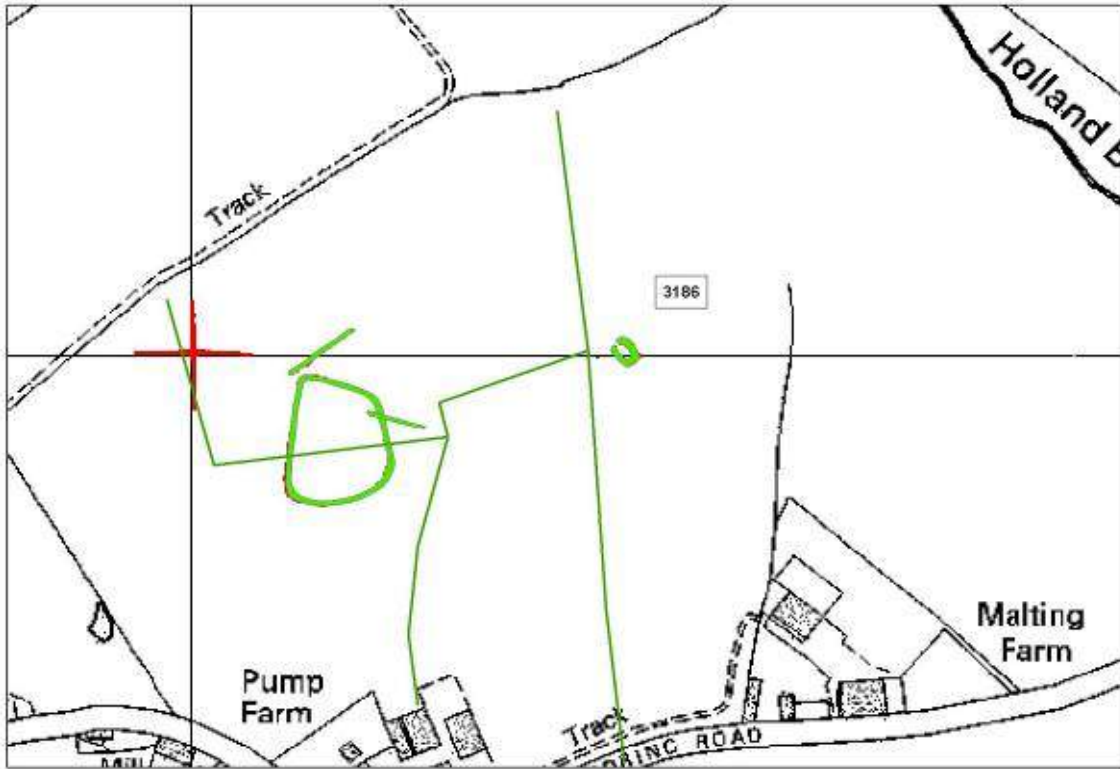


Plate 3 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

Cropmark Name Cropmark at Helions Bumpstead

EHER No. 13407

Location Helions Bumpstead, Braintree, Essex

EHER Description:

A rather oval-shaped ring ditch, with a diameter of c.20m. As with many of the cropmark ring ditches known from Essex, this would normally be presumed to represent a ploughed-out barrow. However the Chapman and Andre map of 1777 shows a wind mill in the approximate location of the cropmark. Illustration of site included in source. Other ref: Field walked by HDAG in 1991 resulting in a few post medieval sherds and a lot of modern brick.

Mentioned in Farries as a Tower Mill, is shown on Chapman and Andre and the OS 2nd 6in (1896).

Associated Features: Located on a farm which has disappeared by the 3rd Edition Map. The crop mark shows a track running to the windmill and corresponds to the trackway running from the town which is shown on the historic maps.

Landscape Setting: Was located on the eastern outskirts of the villages of Helions Bumpstead. The adjacent Mill Lane takes its name from the windmill.

Cartographic: Is shown on Chapman and Andre and the 1st Edition OS Map.
Farries: Mentioned in Farries as a Tower Mill

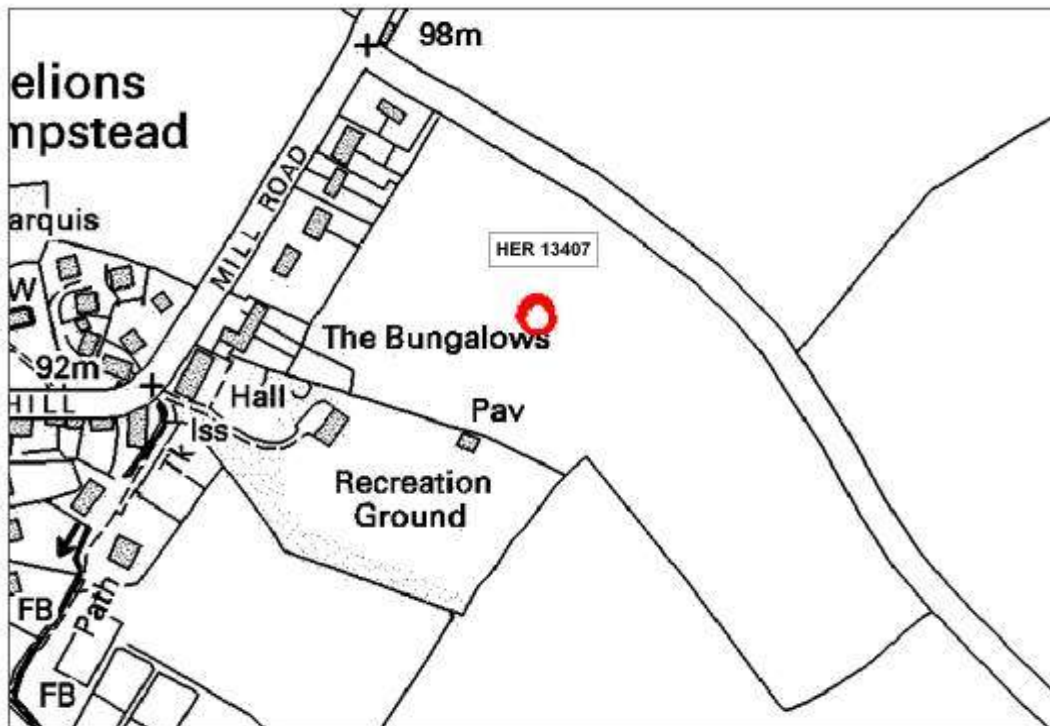


Plate 4 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

Cropmark Name Site of Great Canfield Windmill
EHER No. 4492
Location GREAT CANFIELD, UTTLESFORD

EHER Description:

Site of wind mill. Completely destroyed by ploughing c1973. Probably same as site TL51-118 (see 4491)

Mill mound still extant on RAF 1946 aerial photos. The mound was ploughed away by 1973; OS photos from this time show it as a soil mark.

Aerial survey carried out in summer 2011 identified a cropmark feature that may represent the post mill referred to by Farries. The cropmark is circular with very clear 'spoke' like lines. This is an unusual windmill cropmark.

Associated Features: The crop mark clearly shows defined cross hairs of about 5m across, alongside a former field boundary and possible pond. A trackway leads to Mill House.

Landscape Setting: Located on the outskirts of great Canfield village.

Cartographic: The windmill was well documented from 1676 until the early eighteenth century, and appears on Chapman and Andre map of 1777.

Farries: Post mill in succession to others. Stood 230 yards approximately east south east of the surviving Mill House, which stands on the approach to Marsh Farm from the Takely Road.

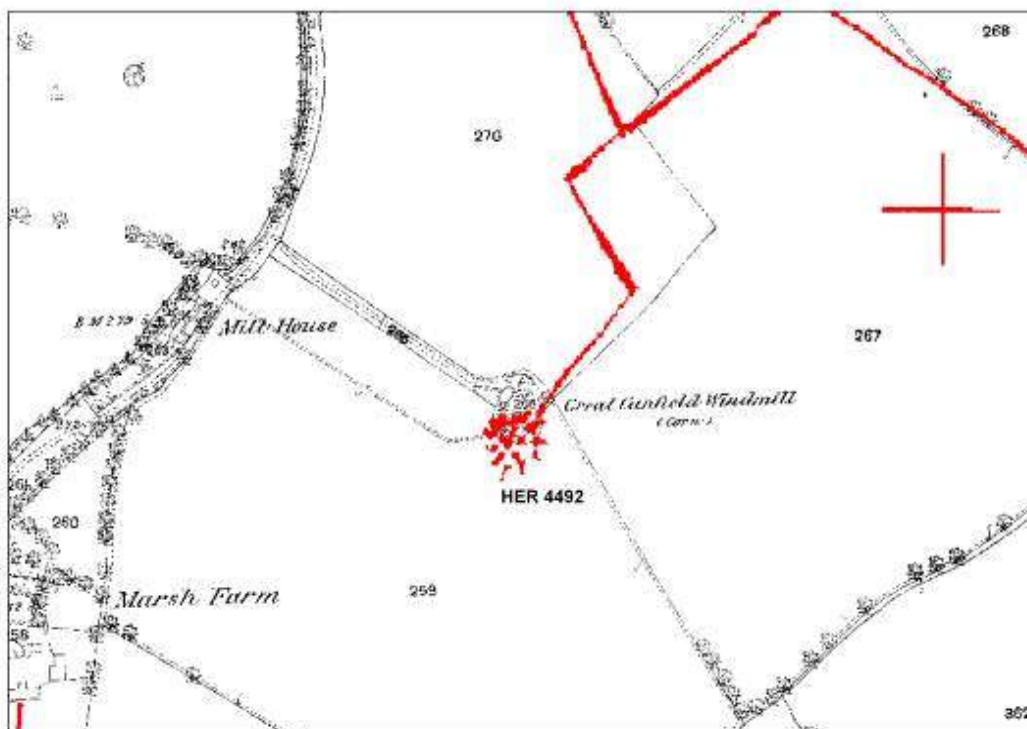


Plate 5 First Edition of the Ordnance Survey 25" Series showing location of windmill and cropmark outline

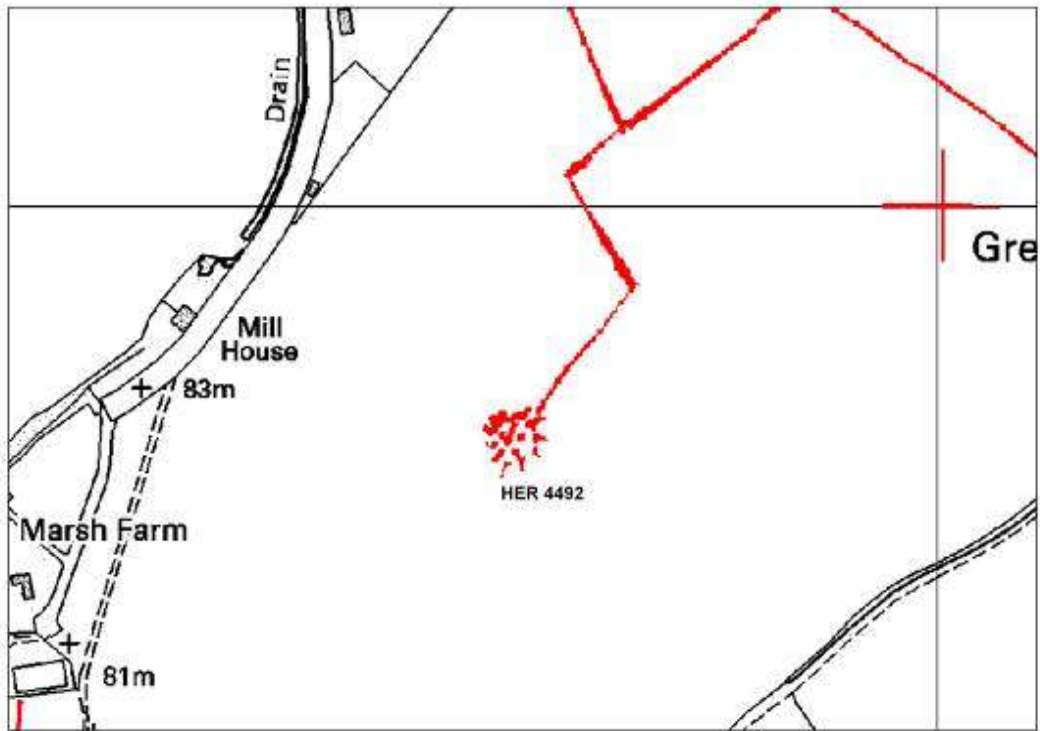


Plate 6 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

Cropmark Name South of High Roding
EHHER No. 1050
Location HIGH ROOTHING, UTTLESFORD

Description:

High Roothing, Uttlesford. Moated mill mound? Moat on OS 2nd ed. 'Mill-hill' marked on Chapman and Andre map. OS 1975-feature was destroyed by ploughing c7yrs ago. Photographed from the air in 1993; this was the first recording of a cropmark of the former moated mound.

Associated Features: Historic maps show traces of track ways leading to the circular cropmark from nearby roads. There are a number of field boundaries and it is in close proximity to a bridleway.

Landscape Setting: Located on the outskirts of High Roding village, the area is named Mill Hill on the historic maps.

Cartographic: A moated structure is depicted on the 1st Edition OS map.

Farries: Not mentioned in Farries



Plate 7 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

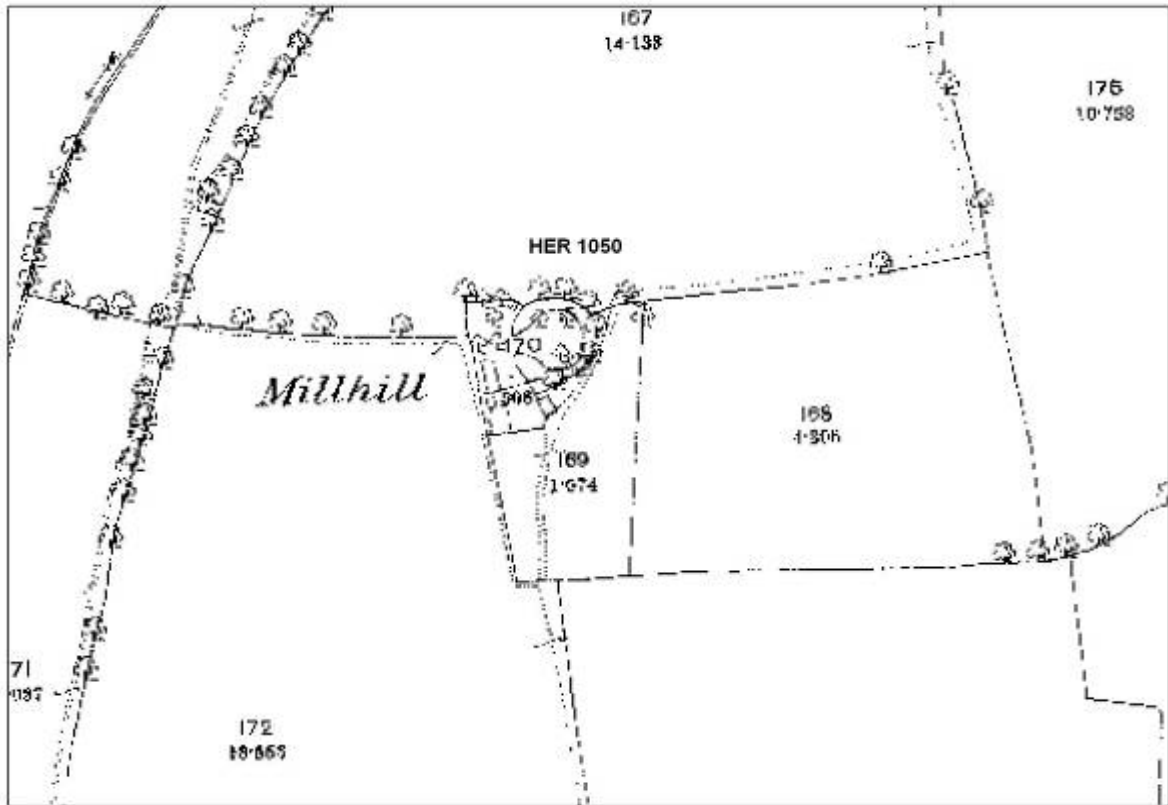


Plate 8 First Edition of the Ordnance Survey 25" Series showing location of windmill

Cropmark Name Cropmark at Flatiron Spring
EHER No. 46547
Location Stansted Mountfitchet, Uttlesford

EHER Description:

Cropmarks of extensive former field boundaries, visible on the 1st edition OS mapping. Among these field boundaries is the cropmark of a ring-ditch 43m in diameter, which could be evidence for a round barrow, however, because of its size it could also be the remains of a former windmill.

Associated Features: Associated features include field boundaries, most of which seem to be marked on the 1st or 2nd Edition maps. In close proximity to a bridleway.

Landscape Setting: Located to the north of Stansted village and Manuden.

Cartographic: Not on historic Ordnance Survey maps. May relate to a windmill that was moved and is shown on Chapman and Andre (1777).

Farries: Not specifically mentioned in Farries, but the site may relate to an unknown site from which the mill (EHER 4703, now demolished) at Walpole House is said to have been moved from. Farries research implies that the post mill was located approximately 300 yards to the north and had a low mound. This description could relate to this cropmark.

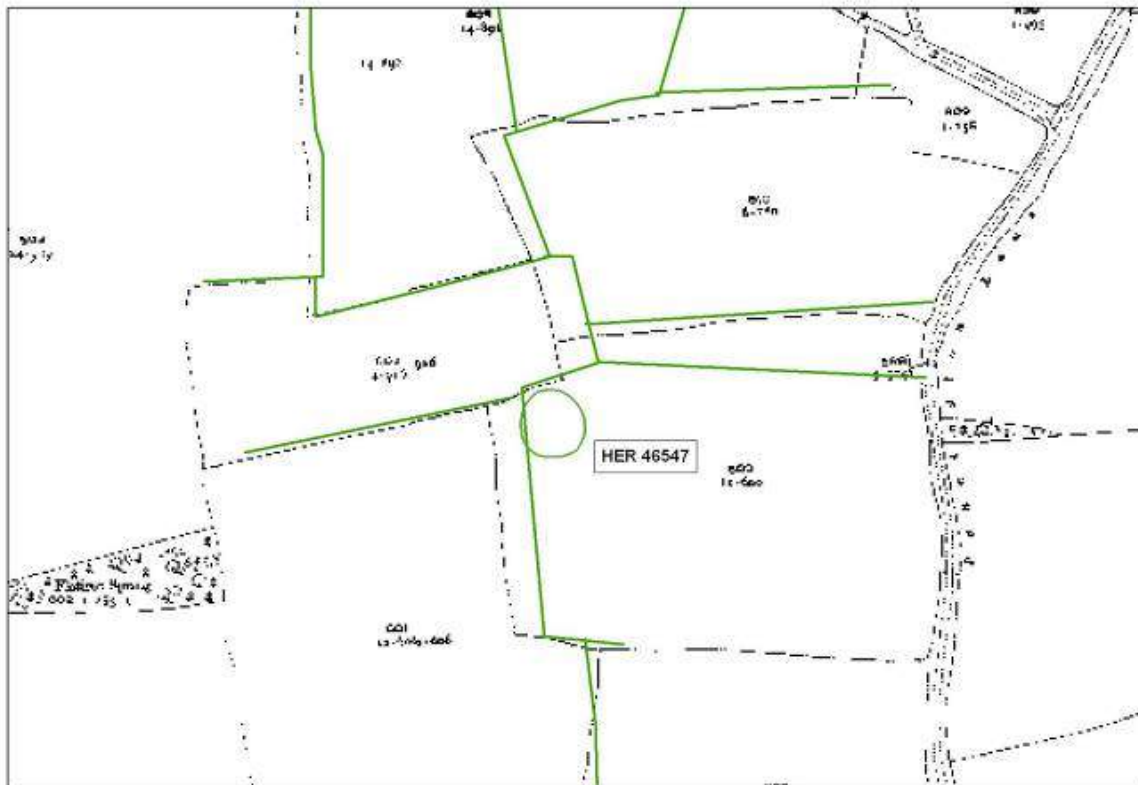


Plate 9 First Edition of the Ordnance Survey 25" Series showing location of windmill and Cropmark Outline

Cropmark Name Bocking-Mill Hill
EHHER No. 6258
Location BRAINTREE, BRAINTREE,

Description:

A moated mound c10m in diameter at the base x 6ft high. According to OS card of 1950 the moat was partly dry but there were indications that at times it was waterfilled. The moat was horseshoe-shaped with no trace of any continuation on the ditch-less, southern side. The name suggests use as a wind mill mound but the moat could indicate it was originally a small motte. In fairly good condition in 1950. According to the 1975 OS card the site is a moated mill mound, c1.6m high with a diameter of 18m on top. The northern half of the mound had a waterfilled ditch c8m wide x 3.2m deep. No trace of the southern side was noticed and "the ditch ends are terminated deliberately". Later but still old boundary banks encroach on the mound's southern side and the northern side of the ditch but they are later than the earthwork. Shown as 'Mill Hill' on 1st Ed OS 6" of 1875 and also as such on other maps. This source suggests that the site is a motte. A sherd of medieval pottery was found on the surface. Tracing of OS card 1975 plan and section in SMR.

Associated Features: In close proximity to a bridleway with cropmarks of field boundaries and moats in surrounding fields.

Landscape Setting: Located on the outskirts of Bocking village in an area called Mill Hill with a trackway running to it from neighbouring farms.

Cartographic: Shown on the 1st Edition Ordnance Survey map but
Farries: No.

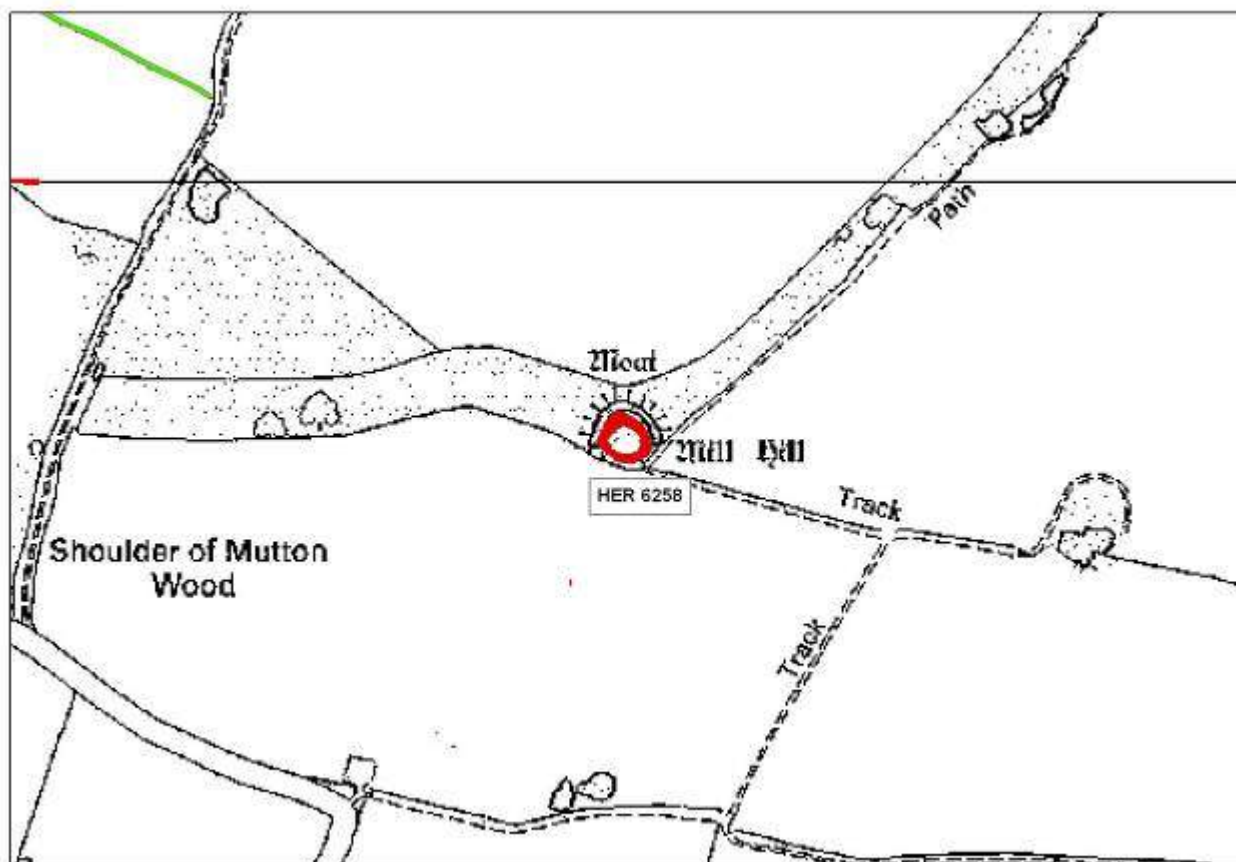


Plate 10 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

Cropmark Name Hallingbury Park
EHER No. 4427
Location Great Hallingbury, Uttlesford

Description:

Moated mound-probably a mill. 500yds south south east of the church. Artificial, bowl-shaped mound with surrounding ditch. 1.7m high, 18m in diameter, ditch 5m wide and 0.6m deep. Overgrown with shrubs and trees. By the OS 1973 survey the mound and ditch had been levelled in c1967, no traces remaining. The farmer reported no finds were made at the time of the levelling. The site is on a gentle north-facing slope, purpose unknown, though suggested as a mill mound. A high spot in rolling country. Tracing from OS 1966 is in SMR. Tracing from sketch by Stokes is in SMR.

The adjacent Hallingbury Park (EHER 19517) shares cropmark features described as 'A cropmark of a possible enclosure in the south-east of the park was mapped in 2008. This feature is 59m by 57m with a central circular enclosure 18m in diameter. While this feature may represent a possible prehistoric settlement enclosure, it may also represent a former parkland feature'.

Associated Features: A range of linear features which could be field boundaries, there appears to be a trackway running towards the cropmark from the village.

Landscape Setting: Located on the outskirts of the village of great Hallingbury

Cartographic: A moated feature appears to be marked on the 1st Edition OS map.

Farries: No

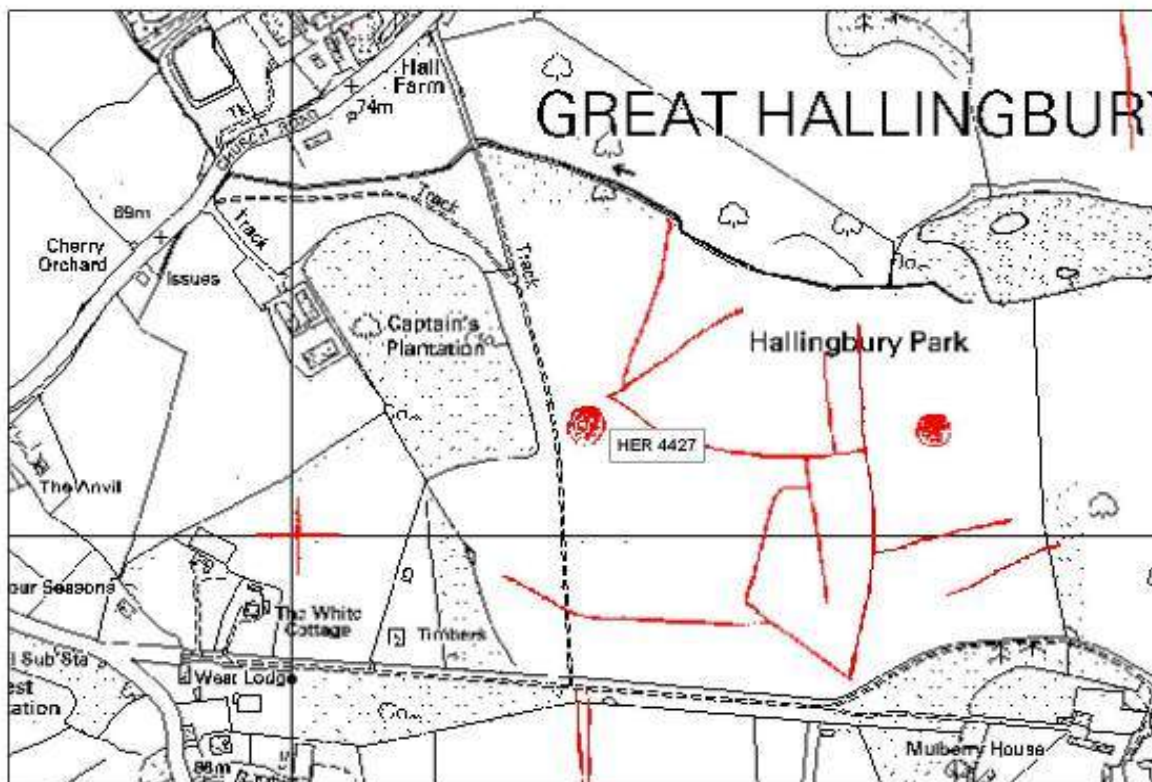


Plate 11 Ordnance Survey 1:10 000 scale map Extract showing outline of cropmark

5.5 Archaeology of Mill Mounds

Early illustrations of post mills show that the cross trees and central shaft were exposed, implying that early windmills were constructed on ground surface, not on mounds. This implies that mounds may have been a later development in windmill construction. Usually, the mound was constructed from earth that was dug from a circular trench surrounding the windmill. Occasionally, a shallow cross-tree will be evident on top of the mound, the result either of the cross-tree being removed for re-use or being left to rot in situ.

The construction of a mound around the cross-trees and central post, such as at Clobbs Wood (EHER 1331), would have enhanced the stability of the entire structure. Windmills built on top of raised mounds seem to have been a later development. Windmills constructed on top of a mound had greater height and were therefore able to catch the wind better. The post timbers were less susceptible to rot than those with the mound built around the post, and by the post-medieval period a roundhouse was being constructed around the mound.

Windmill mounds are generally circular and flat-topped, surrounded by a wide circular ditch with a causeway for ease of approach. Often, the mound is all that remains of the windmill, but their interpretation can be confused with other types of archaeological earthworks such as medieval mottes, medieval archery butts or bronze-age barrows.

In some cases, a windmill was constructed on top on an existing mound from an earlier period, such as at Stansted (EHER48066). This further confuses the interpretation of mill mounds.

Other Circular Mounds

- i. A Bronze Age barrow is an artificial mound of earth, turf and/or stone, normally constructed to contain or conceal burials.
- ii. An Archery Butt is a mound or structure on which targets are placed for archery practice or competition.
- iii. A motte is an artificial steep-sided earthen mound on, or in, which is set the principal tower of a castle.

5.6 Assessment of Mill Mounds in Uttlesford and Braintree

The EHER records 76 mill mounds from across Essex. A survey of fourteen windmill mounds that were listed on the HER for Uttlesford and Braintree were selected for assessment. Each mound was assessed in the field by a team of volunteers. Each mound was photographed and scored according to its historic integrity.

The scoring system was based on the scoring which was established for the English Heritage Monuments Protection Programme (MPP); modified to consider mill mounds. This method of scoring is intended as a simple means of engaging with issues of sensitivity, survival and importance. It is not designed to be definitive and is likely to be subject to change as new information becomes available and understanding develops.

Each mound was assessed according to its historic integrity, with 1 being the most damaged and 3 being the best preserved.

This relates to the state of completeness of the mound. A mound may be relatively well preserved or it may have been disturbed by change land use/development.

1 = Poor. Feature is extensively damaged. Many features badly damaged or destroyed.

2 = Good. Little damage but has been adversely affected from change of use or development.

3 = Very good. Contains features which are well preserved.

Historic Integrity	Score
Poor. Feature is extensively damaged. Many features badly damaged or destroyed.	1
Good. Little damage but has been adversely affected from change of use or development.	2
Very good. Contains features which are well preserved.	3

5.7 Gazetteer of Mill Mounds Surveyed

SITE NAME Mill Hill, Elmdon

PARISH Elmdon

DISTRICT

NGR TL 4665 3928

EHER 125

CURRENT STATUS **Con. Area No** **Listed Grade** N/A **EHAR** No
Scheduled

STATUTORY LIST DESCRIPTION

A mound about 9ft high surrounded by a wet ditch up to 4ft deep and roughly 100ft square crossed on N side. Situated by a farm road on a rise in undulating land. Traditionally a mill mound but tumulus or other moated earthworks have also been suggested. In view of this and its considerable size it is worth preserving. Ditch dry. Cavities on mound due to gun emplacements.

EHER DESCRIPTION

Earthworks in field to the north east of the moat. Well defined with ditch, enclosed and wooded. On OS 6", 1876, Mill Hill. Date of mill unknown. <1> Possibly site of wind mill, 650yds south east of the church. In good condition. <2> A flat topped mound 1.8m high, 23m in diameter. Surrounded, except on the north side, by a narrow wet ditch. Known as 'Mill Hill', probably site of a wind mill. <3> Mound, c9 ft high, surrounded by a wet ditch up to 4 ft deep and roughly 100 ft square crossed on the north side. <4>

Site Assessment = Traditionally a mill mound but has also been suggested to be a tumulus or other moated earthwork. In view of this and its considerable size it is worth preserving. <4>

Present Use: Scrub

Condition: Good

Field Survey 2011

14/5/11

Scheduled site. The mound and ditch are roughly playing-card in shape. Ditch 3-5m wide, 1-1.5m deep. Mound is 26-27m across, 2m high. The ditch is dry and in good condition, but looks as if it might be intermittently wet. The causeway opens onto lane. The mound is covered with dense scrub with nettles, brambles and small immature trees.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

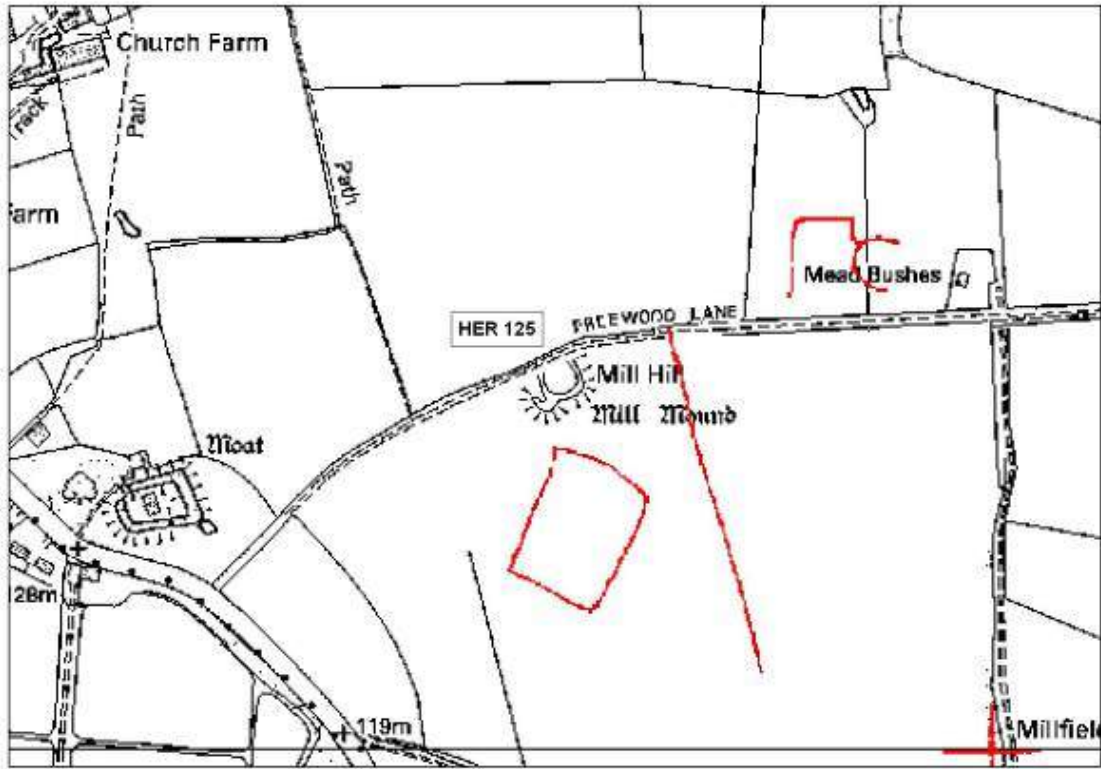


Plate 12 Ordnance Survey 1:10 000 scale map extract showing location of mill mound and adjacent cropmarks



Plate 13 Photograph of Mill Hill, Elmdon

SITE NAME Little Horham

PARISH Thaxted

DISTRICT Uttlesford

NGR TL 5965 2965

EHER 4674

CURRENT STATUS Con. Area No **Listed Grade** NL **EHR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Motte or mill mound or both. Site of Little Horham. <1> OS map card only is in SMR Refers to site as a mill mound. It appears to be moated. <2> Photo in SMR. <3>

Field Survey 2011

14/5/11

Substantial earthwork, 25m diameter at base, 15m diameter at the top, 3-4m high. Oval depression on the top. Ditch 5m wide by 2m deep, with a causeway to the green lane. Large coppice stools along the green lane which is deeply sunken in places, immature trees on the mound and some rabbit holes, otherwise vegetation scarce and preservation good. No trace of Little Horham farm.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

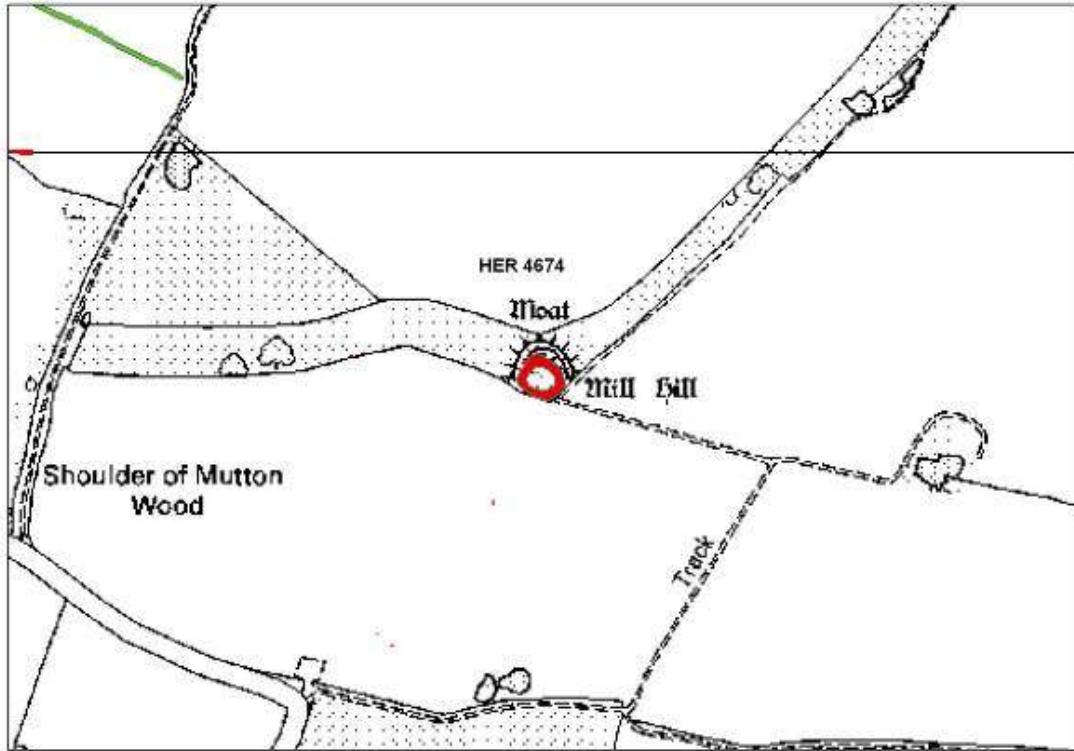


Plate 14 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 15 Photograph of Little Hornhan Mill Mound

SITE NAME Great Codham Hall, Shalford

PARISH Shalford

DISTRICT Braintree

NGR TL 7395 2775

EHER 6464

CURRENT N/A **Con. Area No** **Listed Grade** NL **EHAR** No
STATUS

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

"Moated wind mill mound situated on rising ground above flood plain of R. Pant. Measures 28m diam. (top 8m diam) x 3.8m high. On all but SW side a ditch has been cut into the sloping ground. To the W and SW the ditch is part waterfilled, the level being retained by two "tailes" from the mound at the N and S angles. A stream flows around the other 2 sides" <2> in <1> <3> Tracing of OS plan card is in SMR <4>

Present Use: Woodland

Condition: Good

Field Survey 2011

14/5/11

A substantial earthwork – the ditch is 5m across and 2m deep, getting deeper on the lower slope. The access causeway is on the east side. The mound is 15-18m across and 2-3m high. Densely covered in nettles and elder, with some badger activity, occasional mature trees around the edge.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

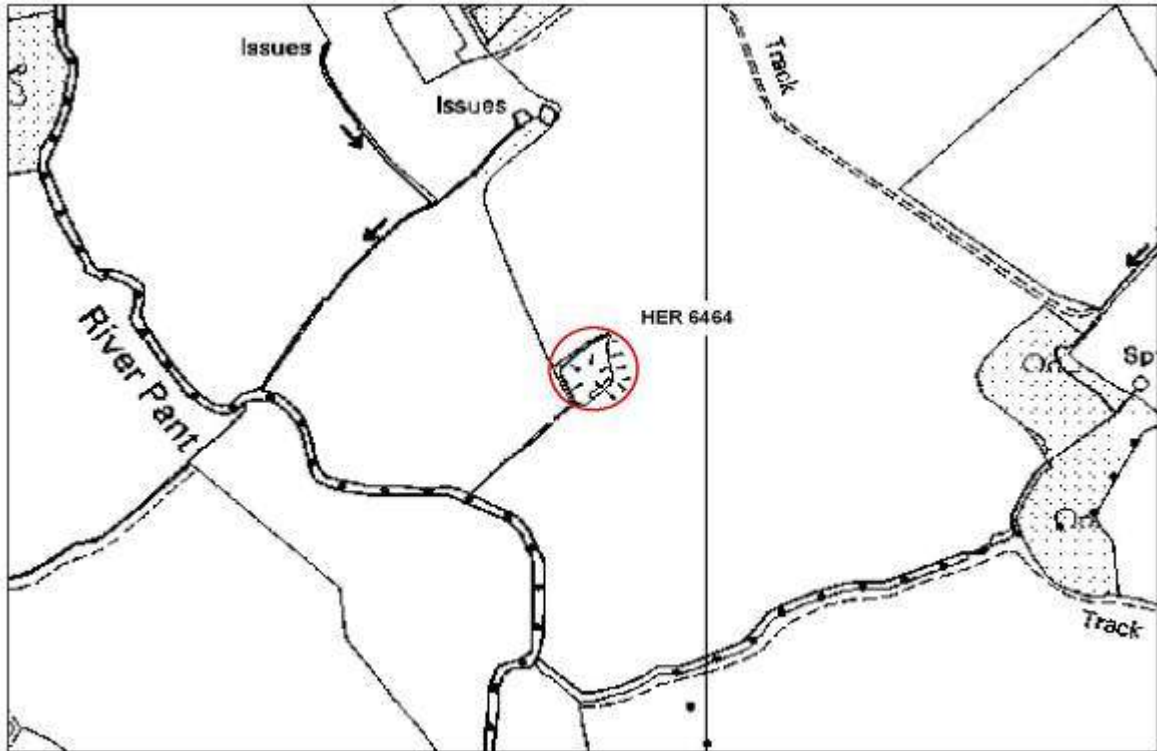


Plate 16 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 17 Photograph of mill mound at Great Codham Hall

SITE NAME Chardwell Farm

PARISH Arkesden

DISTRICT Uttlesford

NGR TL 4705 3446

EHER 3954

CURRENT STATUS Con. Area No **Listed Grade** NL **EHAR No**

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Moat at Chardwell Farm. <1> Moated mound or site of mill, west of Chardwell Farm, 1 mile west of the church. The mound is c60ft in diameter at the base and is surrounded, except on the north side, by a narrow wet ditch. <2> According to OS 1975 there is no trace of a moat. Ponds to the south of the farm may have been wrongly identified. <3> in <1> Incomplete, rectangular moat. <4> Sketch plan on back MSRG card shows two ponds joined by ditches. <5>

Site Assessment = Field visit to assess nature of site and its preservation is needed.

Present Use: Scrub

Condition: Very Good

Field Survey 2011

14/5/11

A small well-preserved mound under scrub/mature trees. Ditch on 3 sides, side to lane was causeway. Mound is 18-20 diameter at base, 12m diameter at the top. There is a bank on the top and a central depression 6m across and 50cm deep. The ditch is 2.5-3m across and 0.8-1m deep. Under scrub – chiefly nettles and elder.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

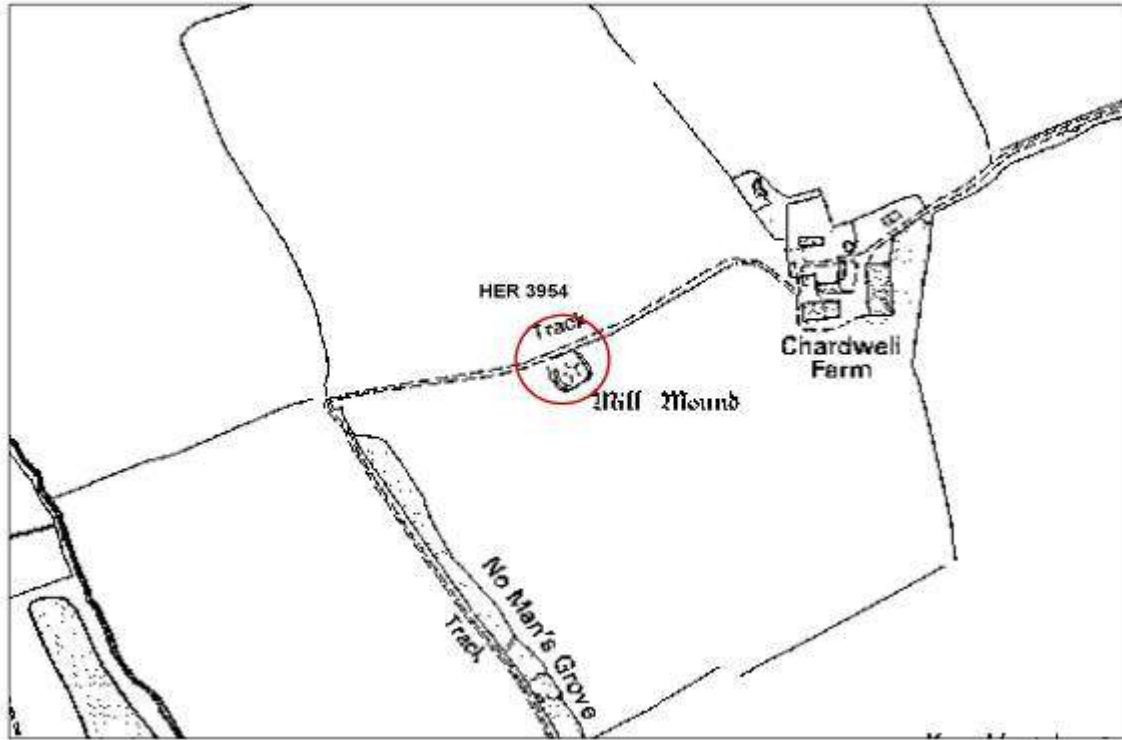


Plate 18 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 19 Photograph of mill mound at Charwell Farm

SITE NAME Fennes Farm, Bocking

PARISH Bocking

DISTRICT Uttlesford

NGR TL 7643 2783

EHER 6258

CURRENT STATUS Con. Area No Listed Grade NL **EHR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

A moated mound c10m in diameter at the base x 6ft high. According to OS card of 1950 the moat was partly dry but there were indications that at times it was water filled. The moat was horseshoe-shaped with no trace of any continuation on the ditch-less, southern side. The name suggests use as a wind mill mound but the moat could indicate it was originally a small motte. In fairly good condition in 1950 <1> <2> According to the 1975 OS card the site is a moated mill mound, c1.6m high with a diameter of 18m on top. The northern half of the mound had a water filled ditch c8m wide x 3.2m deep. No trace of the southern side was noticed and "the ditch ends are terminated deliberately". Later but still old boundary banks encroach on the mound's southern side and the northern side of the ditch but they are later than the earthwork <4> in <3> Shown as 'Mill Hill' on 1st Ed OS 6" of 1875 and also as such on other maps <5> <7> This source suggests that the site is a motte. A sherd of medieval pottery was found on the surface <5> Tracing of OS card 1975 plan and section in SMR <6> <8>

Present Use: Woodland

Condition: Very Good

ERO SOURCES:

Field Survey 2011

Substantial mound with wide water-filled ditch encircling it. The ditch is wide enough to be a moat, c. 8-9m wide and a 2m drop to the water, with at least another 1m below water. The mound was approximately 5-6m high, overgrown with bramble and elder on it, but the preservation is good. To the west of the mound is a flat, embanked area – possibly the site of the Miller's house. It has mature oaks and hornbeams on it.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

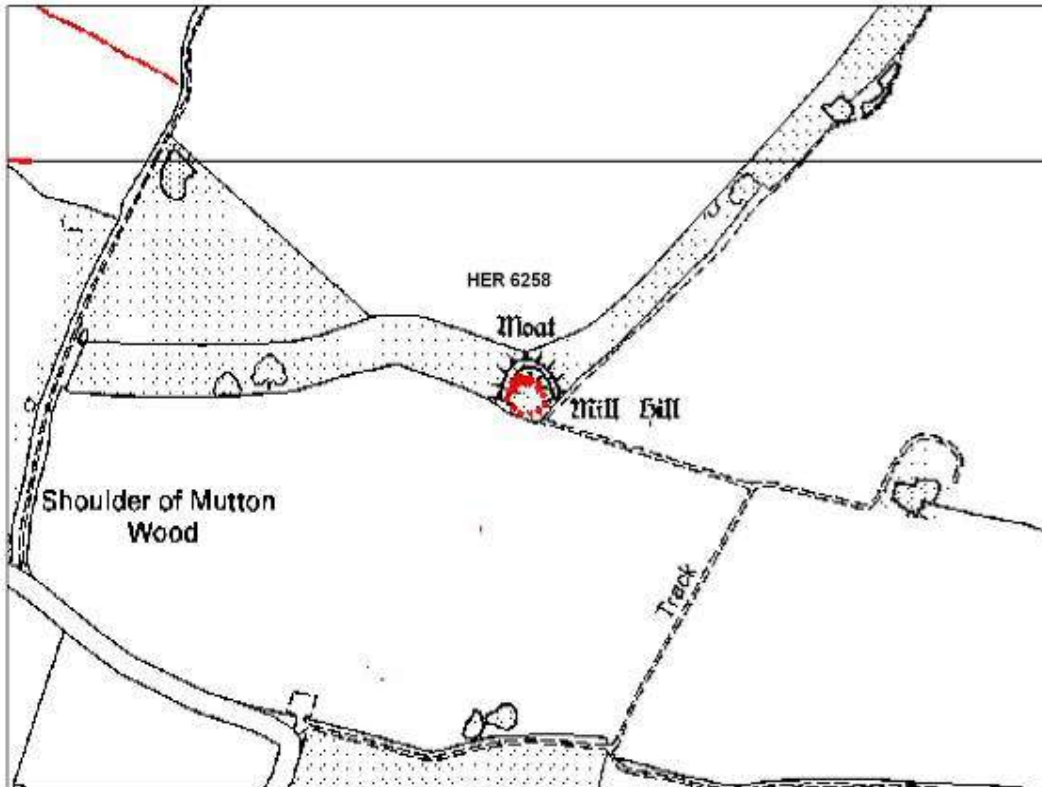


Plate 20 Ordnance Survey 1:10 000 scale map extract showing outline of cropmark and mill mound



Plate 21 Photograph of mill mound at Fenners Farm

SITE NAME Mill Toft, Farnham

PARISH Farnham

DISTRICT Uttlesford

NGR TL 4655 2535

EHER 3862

CURRENT STATUS Con. Area No **Listed Grade** NL **EHAR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Site of wind mill, distinct but probably much degraded. Forms part of a garden Mill, was demolished 1807 <1> Shown on C and A map of 1777 <2>

Site Assessment = Probably much degraded <1> Should be checked.

Present Use: Garden lawn

Condition: Poor

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

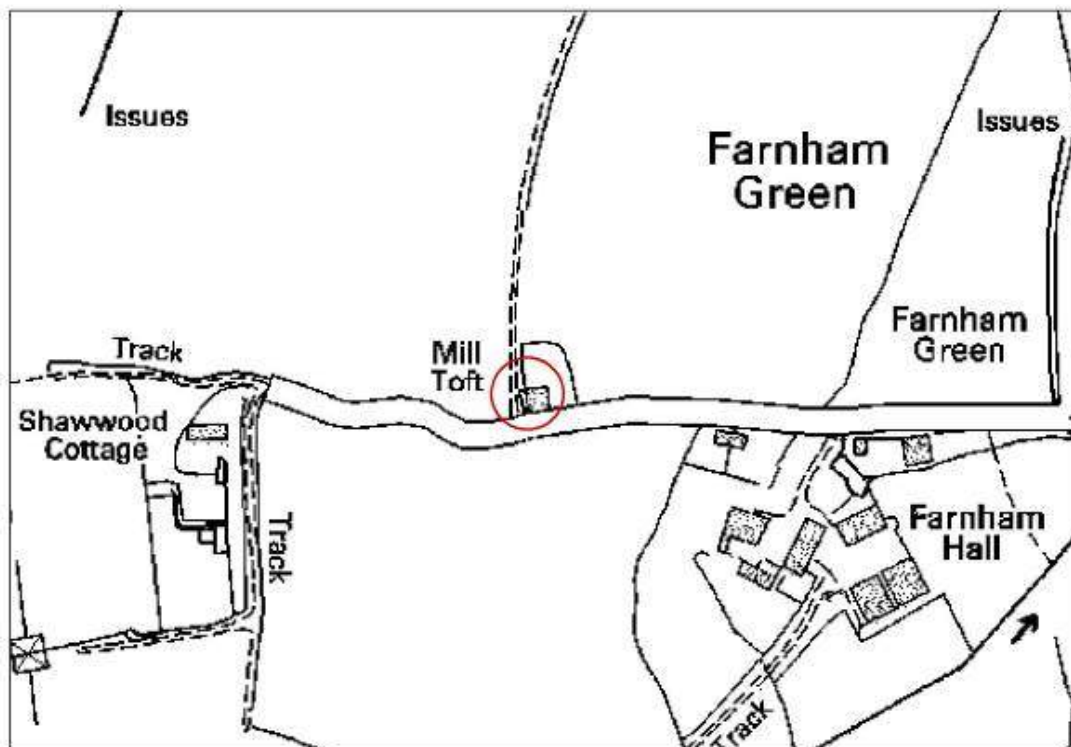


Plate 22 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 23 Photograph of mill mound at Mill Toft

SITE NAME Church Hill, Hempstead

PARISH Hempstead

DISTRICT Uttlesford

NGR TL 6347 3780

EHER 1436

CURRENT STATUS Con. Area No Listed Grade NL **EHR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Moated mound 200m south of St Andrew's Church. Mound is c32m in diameter and 1.8m high, surrounded by a moat, now dry, approximately 2m deep. Entrance on west side. Probably a mill mound. <1> Excavated in March, 1975 for school project. A trench was taken out from the rough centre of a depression in the top of the mound towards the south west side of the moat. Topsoil contained a mixture of artefacts - iron, glass, pot-perhaps with a date range of c1650- recent for most of the finds. Finds were consistent with those in the top part of feature 'A', the 'hole'. The latter was circular, in a surrounding chalky deposit. The top part contained pot, iron nails etc and a coin of Charles I. Excavator thought it was unlikely to have been dug all the way down (1.5m) for a post, more likely to have been a tree hole but the top part may have been dug for the slanting wall, feature 'B'-"presumably the most recent" of any mills that stood here. 2 dark marks and a row of bricks between features A and B were in the surface layer, presumably relate to a pig sty that stood on the site c1940. Feature B was a brick wall, 2 bricks deep, laid in a slot. Perhaps the bottom part of a brick skirting wall or foundations of a wooden skirting wall for the most recent mill on the site. No associated finds. Features 'C' and 'D' were a flint pathway (?) and a brick and flint filled pathway. C contained broken glass from quite recent bottles, c1900 or later. C and D don't seem to be contemporary or to have functioned together and date from about "the time after the final mill to stand on the site was burnt down". <2> Plan and section of trench in SMR. <3> <4> Width of moat 5m, depth 1.5m, encloses area of 0.7ha, raised 1.5m. Place name "The Windmill". Excavator thought it was a motte but Stokes thought this was highly unlikely. <5> On C and A map 1777. <6> Overall diameter of 42m, ditch is dry and averages 6m wide and 1.6m deep. Mound stands 1.4m above ground level, has level top occupied by derelict chicken houses. Access by a causeway on the west side. <8> in <7> Map of earthworks in SMR, from 1897 25" OS map and excavator's notes. <9> Probably a post mill which had burned down possibly around 1900. It was marked on maps for the most part from 1678 to 1896. The mill was timber built and contained two pairs of stones.<10> <11>

Present Use: Store

Condition: Good

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from	2

change of use or development.	
Contains features which are well preserved.	3

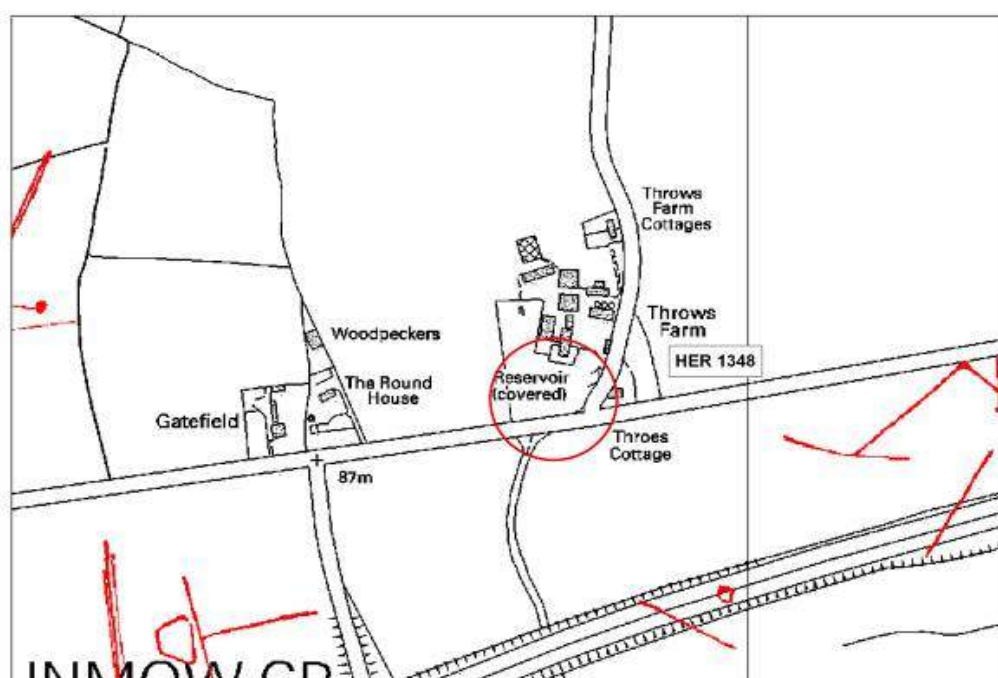


Plate 24 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 24 Photograph of mill mound at church Hall, Hempstead

SITE NAME Bannister Green Felsted mill mound



Plate 25 Photograph taken of the bank of the mill mound at Church Hall, Hempstead

PARISH Felsted

DISTRICT Uttlesford

NGR TL 6952 2042

EHER 1256

CURRENT STATUS

Con. Area No

Listed Grade NL

EHAR No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Mound, probably site of a wind mill, c100ft in diameter at base and 12ft high. <1> Artificial mound in garden of cottage known as Mill Cottage. Approx 3.5m high, flat top approx 16.2m x 10.6m. Originally may have been circular but it seems that a sloping extension was built on the east side from the top of the mound down to the road. A wet ditch surrounds roughly half the perimeter on the west side of the mound. South side of the mound faces the front of the cottage and has been made into a rockery. Excavated 1946-1947. In 1903 the VCH stated that the mound was known as the 'Quaker's Mount'. French (source 4) spoke of the mound as a barrow, presumably early 'British'. Tithe Map of 1844 marks it as Mill Hill, cottage as Mill Cottage. Tradition is unclear-stories of Quaker Burial place, of c250 people being buried here in the Wars of the Roses, that in World War I a skull was found when a trench was dug as part of local defence. In the 1946-1947 excavations 9 skeletons were found from 2'6" to 5' down. Nothing of any interest was found deeper down. The soil didn't seem natural but no finds could date the mound. The trench was narrow and may have missed the centre of the mound, which is irregular, so uncertainty about the possibility of a primary interment. The trench was filled in 1947 though investigations continued concerning secondary interments. Nothing conclusive was found-evidence seems to indicate that the burials are of Quakers of the late 17th-early 18th centuries. Most of the secondary burials were coffined. Little wood survived but some coffin handles were found. Professor Ashworth Underwood thought that handles of this type were rare in humble burials and were rarely older than 18th century. There was a considerable Quaker community in the area. Entries in the Parish Register for 1695, 1696, 1698 and 1732 refer to burials in "ye Quaker Mount". The mound is generally thought to be a tumulus, also used as a mill mound and a Quaker burial ground.<2>--<7> OS 1975-feature takes advantage of exposed position in level area. Appearance and shape are typical of wind mill stead's in the region. Tail of the mound at east end and surrounding semi-circular ditch are indicative. Ditch is shallow, water filled and cut seems contemporary with the mound. No evidence it ever completely surrounded the mound. Disused by the 17th century, appearance and name are conclusive of use and probable origin. <9> in <8> Other refs: <10> <11>

Present Use: Garden

Condition: Good

Field Survey 2011

In good condition, grassed mound in garden of property. Terraces or walkway cut into southern side of the mound. Survives in good condition.

Historic Integrity	Score
--------------------	-------

Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

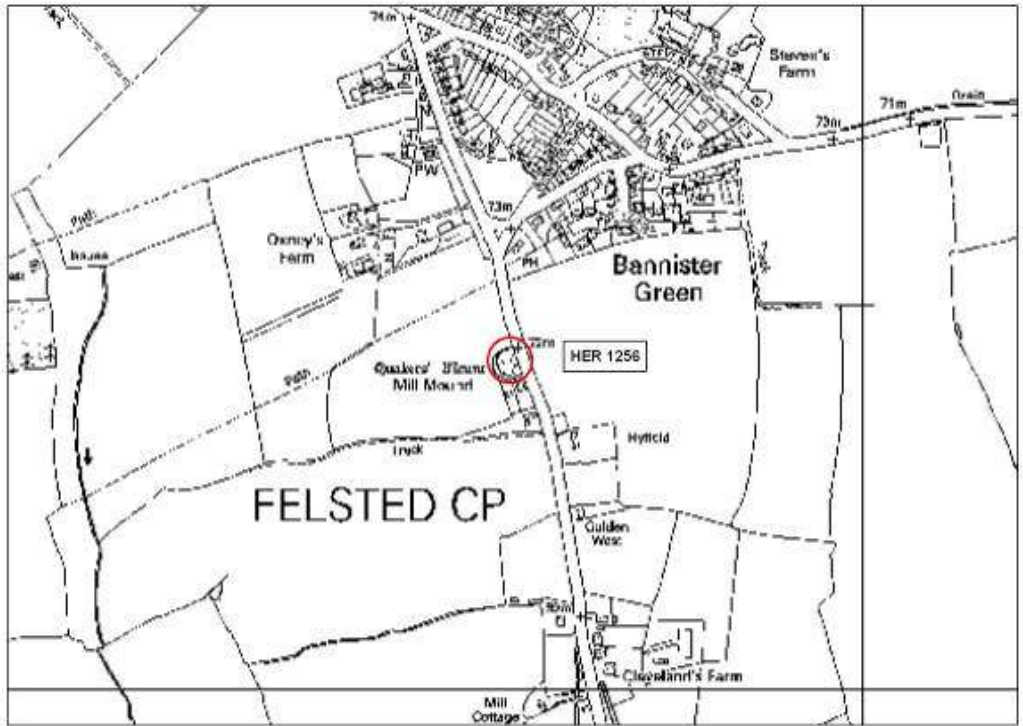


Plate 26 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 27 Photograph of mill mound at Bannister Green

SITE NAME Windmill Site at Little Canfield

PARISH Little Canfield

DISTRICT Uttlesford

NGR TL 6007 2075

EHER 47498

CURRENT STATUS Con. Area No Listed Grade NL **EHR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Post mill. Stood immediately south west of the existing mill house about 100 yards north of Skipps Farm on the west side of Highcross. <1>

Present Use:

Condition: Good

SITE BACKGROUND:

Field Survey 2011

House now built on top.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

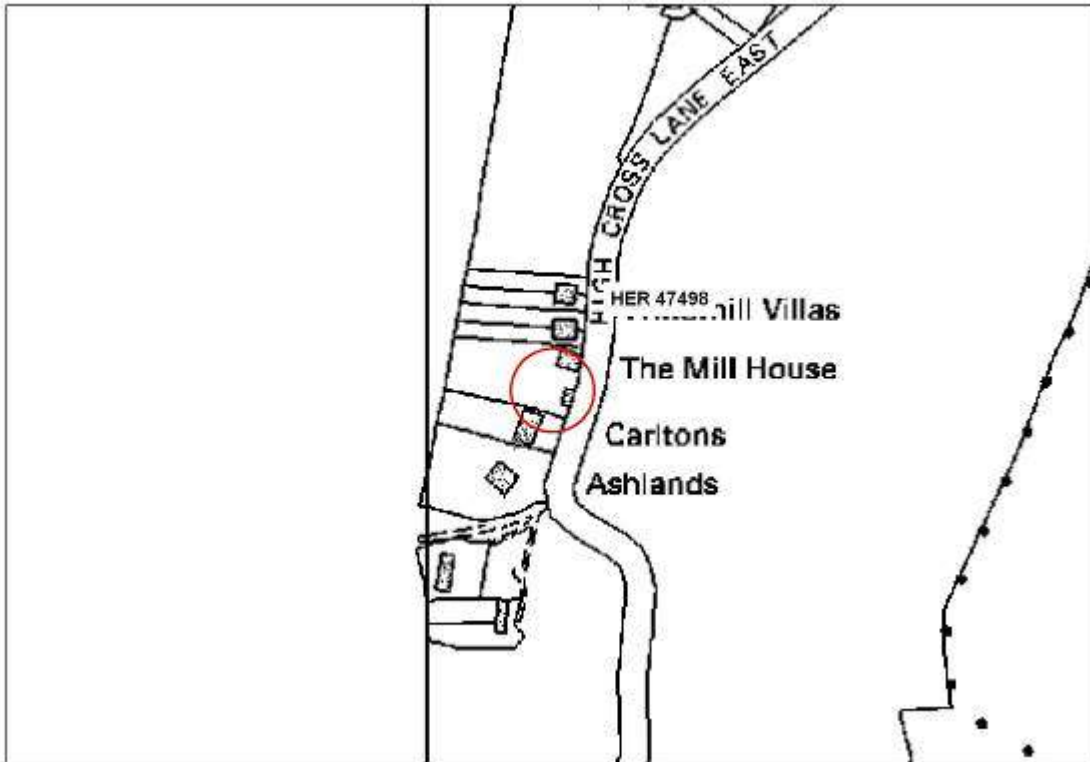


Plate 28 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 29 (Photograph of windmill site at Little Canfield)

SITE NAME Throes Farm, Dunmow Road, Little Dunmow

PARISH Little Dunmow

DISTRICT Uttlesford

NGR TL 6581 2237

EHER 1348

CURRENT STATUS **Con. Area No** **Listed Grade** NL **EHAR No**

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Mound in grounds of house called `Throes', not marked on C and A map at all. Mill mound? Large size and height, post medieval? <1>

Present Use: Mound

Condition: Good

SITE BACKGROUND:

Field Survey 2011

24/05/2011

Not a windmill mound – it is the earthen mound over a covered reservoir which serves the house and farm. Bits of the brickwork of the reservoir are visible in the sides of the mound – probably early 20th century in date.

This mound was originally considered to be a windmill mound, but closer inspection suggests that it is it is the earthen mound over a covered reservoir which serves the house and farm. The original HER description of Throes Mill has likely been confused with the nearby Throwes Mill, the base of which has been converted into a cottage.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

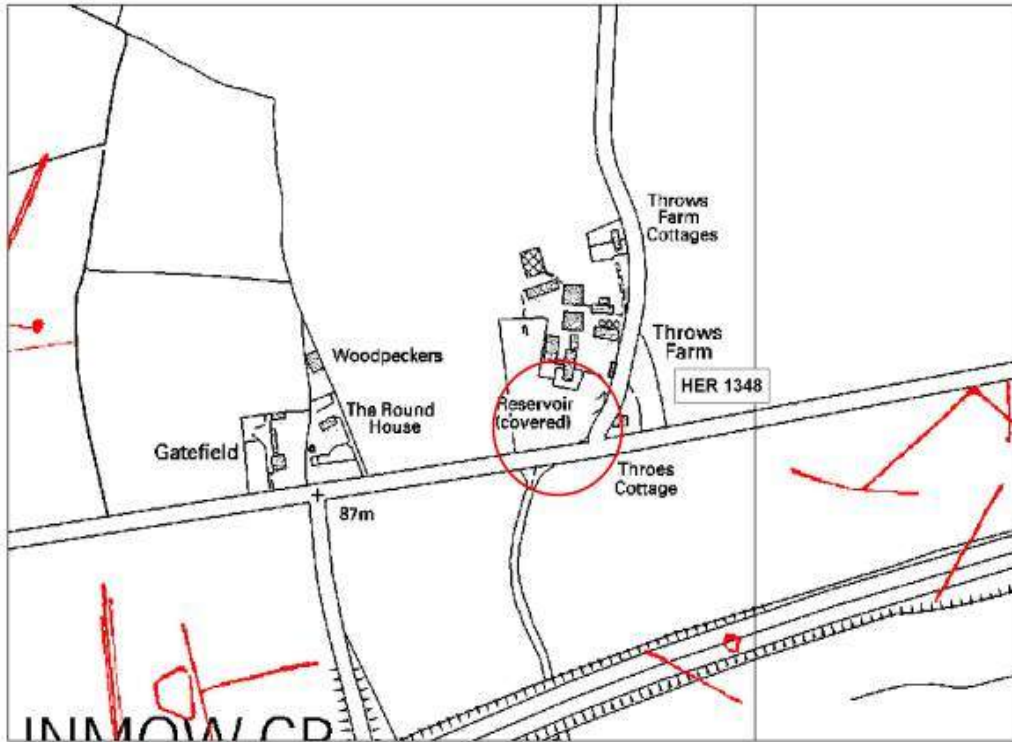


Plate 30 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 31 Photograph of Throes mill mound

SITE NAME Princes Well, Radwinter

PARISH Radwinter
NGR TL 6061 3664

DISTRICT Uttlesford
EHER 1509

CURRENT STATUS Con. Area No **Listed Grade** NL **EHAR**

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Site of wind mill mound-moated. Moat is 4m wide x 0.5m deep. Mound is raised and 1.5m high. Area enclosed is 1400 sq m. <1> Mound is enclosed and wooded. The mill was standing in 1799. Mound stands 2.5m above the ditch bottom, showing no evidence of occupation. <2> in <1> Mill shown on C and A map. <3> MSRC card <4>

Present Use: Scrub
Condition: Good

SITE BACKGROUND:

Field Survey 2011

24/05/2011

Approximately 2m high mound, under elder scrub and disturbed by rabbits. The outer area is under nettles. No sign of any building materials in the rabbit upcast. Site resembles a miniature motte in appearance with mill mound moated on three sides and slightly raised platform to the south and west and demarcated with deep field ditches demarcating it.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

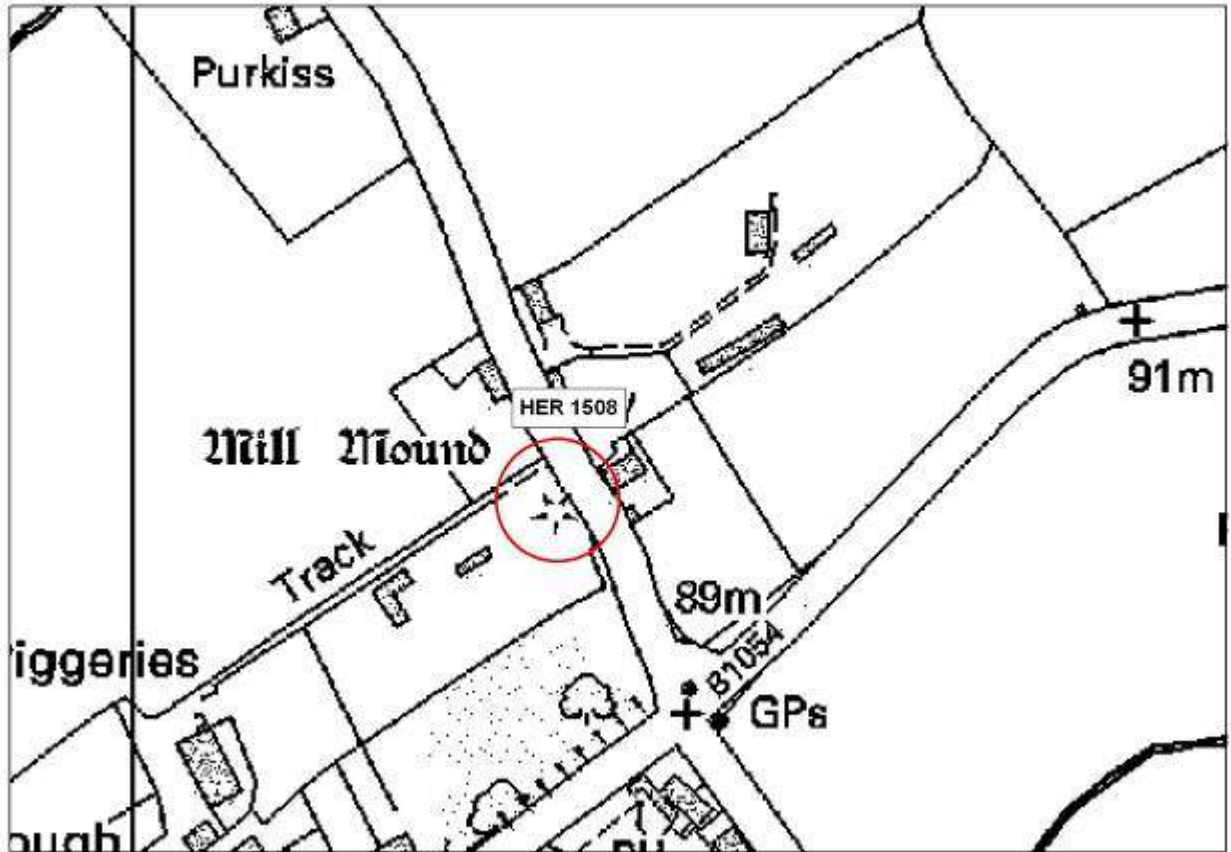


Plate 32 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 33 Photograph of Princes Well Mill Mound, Radfield

SITE NAME Mill End, Radwinter

PARISH Radwinter

DISTRICT Uttlesford

NGR TL 6117 3767

EHER 1508

CURRENT STATUS Con. Area No

Listed Grade NL

EHAR No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Site of wind mill (corn), demolished c1900. <1> On C and A map of 1777. <2> Very mutilated mill mound 2m high, on high ground. Half quarried away, further soil dumped over what remains. It is overgrown, shows no evidence of a mill but a windmill is shown on the OS 1" of 1902-1903 and on the Tithe Map of 1838 - 1839. <3> <4> <5> Partly destroyed, no masonry etc is visible. Could have been enlarged by use as an agricultural dump. Part destroyed on the west side. Sited at edge of a field near the crossroads at the Plough PH, Radwinter. Location shown on SMF sheet. Drawing of mound on back of SMR sheet. <6> <7> <8>

Site Assessment = Half quarried away and soil dumped over what remains. <3> Attractive element in landscape-could be kept? <6>

Present Use: Scrub Good

Condition: Good

SITE BACKGROUND:

Field Survey 2011

24/05/2011

Approximately 2m high mound, bramble-covered. Ditch still extant on the roadward side. The side facing the field has been damaged, possibly by a machine. There has been some dumping of rubbish in the ditch. Mound has large number of rabbit burrows.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

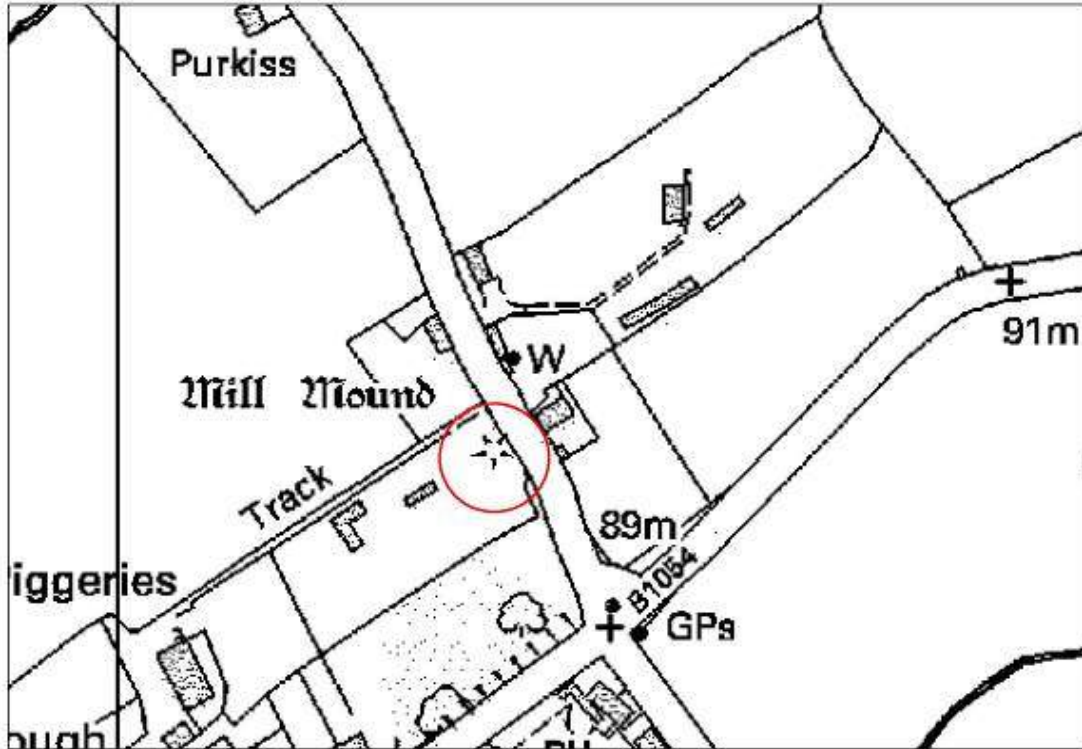


Plate 34 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 35 Photograph of mill mound at Mill End, Radwinter

SITE NAME Mill Hill, Takely

PARISH Takely

DISTRICT Uttlesford

NGR TL 5769 2208

EHER 4714

CURRENT STATUS Con. Area No **Listed Grade** NL **EHAR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Moated mill mound. Mill Hill 1767. Isolated site on a field boundary between 'Pond Catley Field' (Essex placename 1315) and 'Gun Shot Field' (Essex placename, Gonnes, 1477). 1767 map of Warish Hall and Shearing Hall belonging to New College, Oxford. Not on Tithe map 1838. <1> <2> Tracing of 1st edition OS 6" is in SMR, shows Mill Hill. <3>

Present Use:

Condition: Good

SITE BACKGROUND:

Field Survey 2011

Ploughed flat.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

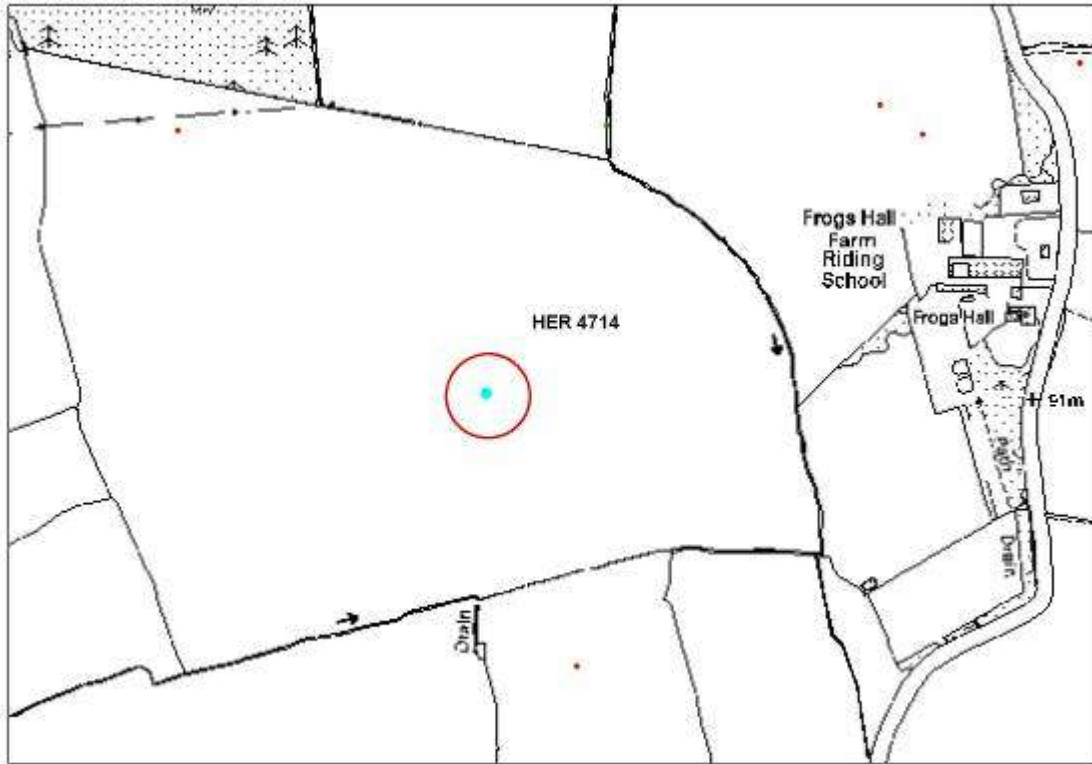


Plate 36 Ordnance Survey 1:10 000 scale map extract showing location of mill mound



Plate 37 Photograph of flattened mill mound location at Mill Hill, Takely

SITE NAME Little Horham

PARISH Thaxted

DISTRICT Uttlesford

NGR TL 5965 2965

EHER 4674

CURRENT STATUS Con. Area No **Listed Grade** NL **EHR** No

STATUTORY LIST DESCRIPTION

EHER DESCRIPTION

Motte or mill mound or both. Site of Little Horham. <1> OS map card only is in SMR. Refers to site as a mill mound. It appears to be moated. <2> Photo in SMR <3> Nothing at all on MSRG card. <4> Other ref: <5>

Present Use: Woodland

Condition: Very Good

SITE BACKGROUND:

Field Survey 2011

Substantial earthwork, 25m diameter at base, 15m diameter at the top, 3-4m high. Oval depression on the top. Ditch 5m wide by 2m deep, with a causeway to the green lane. Large coppice stools along the green lane which is deeply sunken in places, immature trees on the mound and some rabbit holes, otherwise vegetation scarce and preservation good. No trace of Little Horham farm.

Historic Integrity	Score
Feature is extensively damaged. Many features badly damaged or destroyed.	1
Little damage but has been adversely affected from change of use or development.	2
Contains features which are well preserved.	3

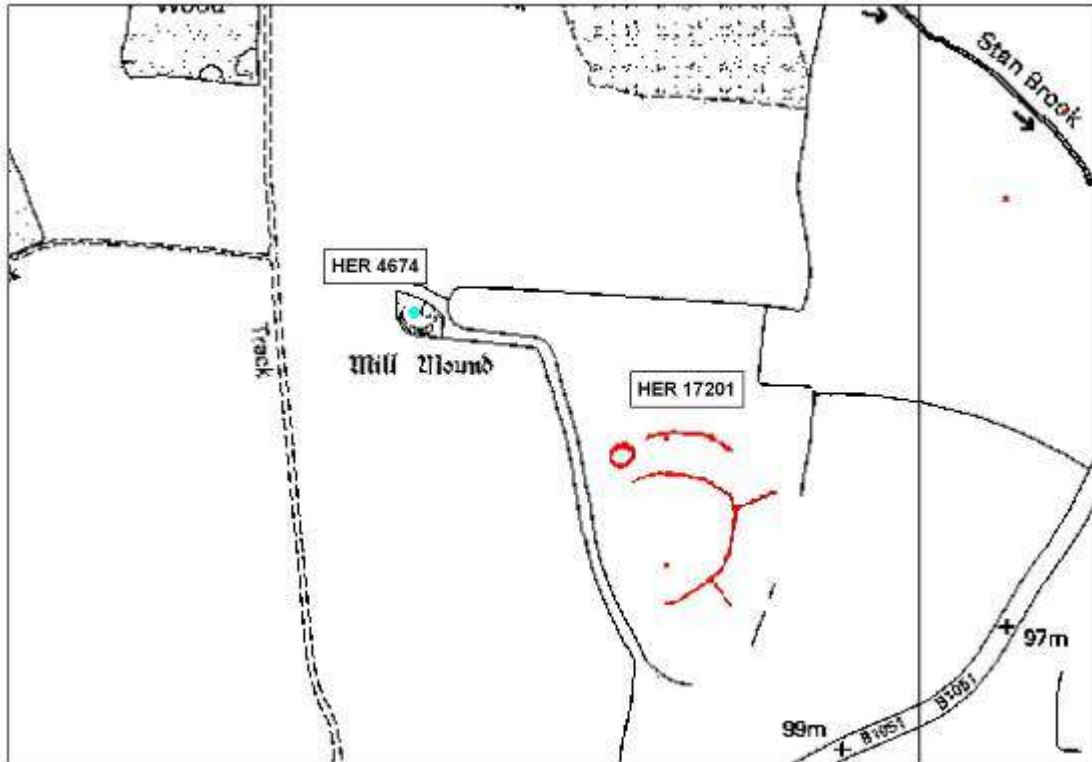


Plate 38 Ordnance Survey 1:10 000 scale map extract showing location of mill mound and adjacent cropmarks



Plate 39 Photograph of mill mound at Little Hornham, Thaxted

5.8 Results of Survey

The condition of the mounds visited was generally very good, despite only two being protected through scheduling. Five mounds were considered to have 'good' survival, five were considered 'very good' and four were considered 'poor'. Of nine mounds that survived, five of the mounds are considered to have originally functioned as a motte, one was probably never associated with a windmill and three may have been constructed specifically for a windmill.

EHER No	Name	District	Survival	Identification
1348	Throes Farm	Uttlesford	Good	Not a windmill.
1436	Church Hill, Hempstead	Uttlesford	Good	Moated mound, possibly a Motte in origin.
1508	Radwinter	Uttlesford	Good	Moated windmill mound.
1509	Radwinter	Uttlesford	Good	Moated mound, possibly a Motte originally.
125	Elmdon	Uttlesford	Very Good	Moated mound, possibly a Motte in origin.
3862	Farnham	Uttlesford	Poor	Shallow mound.
3954	Chardwell Farm, Arkesden	Uttlesford	Very Good	Mound with interrupted ditch and causeway. Possibly a motte originally.
4674	Little Horham	Uttlesford	Very Good	Mound with interrupted ditch and causeway. Possibly a Motte originally.
6258	Fennes Farm	Braintree	Very Good	Moated mound. Possibly a Motte in origin.
6464	Great Codham Hall	Braintree	Very Good	Mound with interrupted ditch and causeway.
8133	Felix Hall, Kelvedon	Braintree	Poor	Ploughed Flat.
4714	Takeley	Uttlesford	Poor	Ploughed Flat.
47498	Little Canfield	Uttlesford	Poor	Built over.
1256	Bannister	Uttlesford	Good	Mound, partly ditched.

Figure 16 Table of Windmill Mounds Surveyed

Three types of mound were identified through this assessment:

i. Mounds that were originally constructed for a windmill.

The mound at Thaxted (HER 4674) is the most likely candidate which can be classified as a mound that was originally constructed for a windmill. The mound is not on the historic maps and is not mentioned in Farries. The adjacent field has cropmarks which may reflect settlements associated with the windmill and the site may date to the medieval period.

Distinguishing between mill mounds and other types of mounds can be difficult. The mound at Arkesden in Uttlesford (HER 3954) is not mentioned in Farries or indicated on any of the historic maps. It is likely that this is a windmill mound dates to the medieval period, but there is no evidence to rule out that it did not originally function as a motte.

The same argument applied to the Scheduled windmill mounds at Elmdon in Uttlesford (EHER 125) and Tolleshunt Major in Maldon (EHER 11389). At Elmdon, the mound could be identified as either a motte or a windmill due to its large size, moated ditch and sub-circular shape. The site is located on 'Mill Hill', but no windmill is shown on any of the historic maps and it is not mentioned in Farries. It is possible that the mound was reused at least once throughout its history. Likewise, at Tolleshunt Major, the mound was originally Scheduled as a Bronze Age round barrow, but is known locally as the 'Old Mill'. It is not on the historic maps and is not mentioned in Farries.

ii. Mounds that may have had an earlier function such as a motte or barrow.

The large mound in Epping Forest (HER 3739) on the south side of Stonnards Hill road was excavated between 1968-1969 by the West Essex Archaeology Group. Excavations suggested that a small windmill had been built on the top of the mound in the second half of the 17th century. That finds indicated the mill had a very limited life, it was clearly dismantled with care, possibly for use elsewhere. The site director Frank Clark found the site puzzling and impractical for the purpose of a windmill. The mound measures a maximum of 41.5m at its SW-NE ovoid shaped base. The top of the mound is about 32m in diameter and about 6.5m in height. The east and south sides have a ditch up to 7.5m wide and 1 –1.75m deep. The steep bank on all sides of the mound is almost impossible to climb, except a section on the NNW of the mound where a (hidden) steep track exists. The volume of the mound is about 7,200³meters and would take about 50-55,000 man hours to construct. It is likely that this mound had an earlier function and was later used as a windmill site due to its size and location.

While it has generally been assumed that evidence of post holes of a timber structure would be needed to identify a motte, a recent excavation at Mount Bures (HER 9161) has shown that this is not necessarily. At Mount Bures, it is thought that the motte was used as a look-out post, the location having been chosen due to the presence of a raised Bronze Age barrow. The Civil War of the twelfth century during the reign of King Stephen prompted the construction of many mottes of this type. While reuse of earlier mounds would have been common and logical, it is also true that many new windmill mounds and windmills would have been constructed in the twelfth century to support the expanding population.

iii. Mounds that probably did not have any archaeological purpose.

As well as sometimes representing earlier archaeology, in some cases what appears to be a windmill mound can have an entirely different purpose, such as the mound at Little Dunmow (HER1348). Cartographic evidence suggests that the earthwork is the earthen mound over a covered reservoir which serves the house and farm. Exposed areas of the brickwork of the reservoir are visible in the sides of the mound – probably early 20th century in date.

6 Priorities

The priorities are based on a comparative assessment of all known surviving windmills and the mill mounds and cropmarks that have been assessed in this report. It considers those afforded statutory protection at present, those that may require a re-assessment or re-grading of their present designation and those that merit future

protection/preservation through listing, conservation area status, and addition to a local list or recognition within Local Development Frameworks.

Like watermills, windmills were and still are a familiar and an important part of the Essex Landscape. Although none of the early Domesday or manorial mills survives, in many cases their sites have evolved and continued in use to the present day. These historic sites and those charting the development of milling into the post-medieval and industrial period retain significant potential for the archaeological investigation and study of mill sites, their architecture and technologies. While this report considers each site in terms of its archaeological value, it mainly concentrates on the recording, assessment and recommendations of the extant resource.

Each mill is assessed comparatively and graded in terms of its architectural, historic and technological significance. The priority grading ranges from:

- * Sites of Local Significance (low)
- ** Sites of Regional/National Significance (med)
- *** Sites of National Significance (med-high)
- **** Sites of Major National/International Significance (high)

6.1 Sites of Local Significance (0) and low priority

Sites which scored 0 have either been demolished completely, or in some cases only the footings remain. These sites are equally divided between postmill and smock mill remains. The footings of the roundhouse at Griffins End (EHER 47476) and the smock mill base at Lindsell (EHER 1323) are used for garden flower beds. Despite being badly demolished, the continued use as a landscape feature is interesting and worth preserving. The post mill at Moreton is included as the site was inspected as part of the survey. At South Ockendon, no evidence of the smock mill base survived, but associated monuments such as a potential mill leat and moat, suggest that the windmill may have earlier origins.

EHER	SITE NAME	CURRENT STATUS	RECOMMENDED ACTION
47476	Giffins End Roundhouse Remains	None	No recommendations but building may have local historic value.
4098	Moreton Post Mill (Demolished)	None	None
5275	South Ockendon Smock Windmill (demolished)	None	None.
1323	Lindsell Smock Mill	None	None.

6.2 Sites of Local Significance (*) and low priority

As one would expect, none of the eleven windmills in this category are listed buildings. The smock mill at Great Sampford (EHER 1567) was unfortunately demolished, and was de-listed in 2005, only the base remains. From this group of eleven, six are roundhouse remains and five are smock mill bases. Nine of the windmill remains in this category have been converted to residential use, while one has been converted for small scale commercial use. The roundhouse at Maylands (EHER 47642) forms part of a bakers premises. At Henham (EHER 4670), the windmill base is used as a low wall of a flower bed. The windmill roundhouse at Welfords (EHER 38145) has been incorporated into a interesting modernist residential property, only the shape of the roundhouse still remains. The roundhouse at Orsett (EHER 47636) is a good example of a well persevered site, which maintains its historic character despite having been converted for residential use. The windmill remains in this category have been subjected to modernisations and unsympathetic alterations affecting original materials, spatial integrity and loss of milling technology.

These sites are of local significance only, and most have been recommended for inclusion on a local list. Although these sites are of low priority and do not warrant statutory protection, they still contribute to the character and heritage of their area. They should be recognised within future Local Development Documents. Where they fall within areas affected by large scale development, their importance should be considered as part of the Master Plan Development.

EHER No.	SITE NAME	CURRENT STATUS	RECOMMENDED ACTION
47642	Mayland, Mr Mill Roundhouse	None	The roundhouse may warrant inclusion on a local list.
3038	Thorpe-le-Soken Post Mill Roundhouse	None	The site may be considered for inclusion on a local list.
47636	Orsett Post Mill Roundhouse	None	No particular action is required; the roundhouse is maintained in good condition and may be eligible for inclusion on a local list, depending on local criteria.
38145	Site of Welford's Windmill	None	While inclusion on a local list may be warranted, it would not meet the specification for listing.
47486	Bulmer Smock Mill Base	None	Recommend for listing at Grade II.
1567	Pettit's or Day's Mill, Great Sampford	None	None.
1058	Mashbury Smock Mill Base	None	None.
45474	High Ongar Smock Mill Base	None	None.

251	Wimbish Tye Green Smock Mill Base	None	The building may warrant inclusion on a local list, depending on local criteria.
4670	Henham Post Mill Roundhouse	None	Given the fragmentary remains of the site, it does not seem that the site would warrant inclusion on a local list or a statutory list.
26195	Frost's Mill Halstead	Grade II	Maintain current listing.

6.3 Sites of National/Regional Significance (**)

Four of windmills out of the ten in this category have statutory protection though listing at Grade II, these include the only 3 Tower mills in the category and one post mill round house. As well as three Tower mills, this category contains five post mill roundhouses and one smock mill base. From this group of windmill remains, the only one that is suggested for listing is Belchamp Walter (EHER 6871). Due to its intact roundhouse walls, surviving trestle and bakery equipment it is considered an important regional site, and warrants inclusion on a local list. While only the base of the roundhouse at Horndon-on-the-Hill (EHER 1883) remains and is used as a garden feature, it has been given Grade **as it contains the timber trestle of the post mill. At Great Holland (EHER 2853), the windmill smock mill base is included in this category because most of the base remains, and internal floors are intact.

The roundhouse at Chatham Green (EHER 47643) is the only windmill site in the category to be converted to residential property. It has been converted into two bedrooms, providing accommodation to the attached restaurant. Gainsford End Tower mill (EHER 28430) has been lovingly restored and is an excellent example of sympathetic restoration for residential use. The windmill at Debden (EHER 3772) could not be fully inspected as it is on private property; its condition should be monitored.

All the windmills have been affected by subsequent reuse, and very few of the original fixtures, fittings or technologies survive. The removal of internal machinery, floors and in some cases the sails, affects the overall significance. However, these sites are generally watertight, well cared for and in good condition. They are important local landmarks and those that are not already listed should be considered for local listing.

EHER No.	SITE NAME	CURRENT STATUS	RECOMMENDED ACTION
6871	Belchamp Walter Post Mill Roundhouse (Cottonbury)	None	List at Grade II
33784	Matching Tye Post Mill Roundhouse	None	Retain current Grade II listing.
47634	Chatham Green Post Windmill Roundhouse	None	Would be a good candidate for local listing.
1883	Horndon-on-the-Hill Post Mill Roundhouse	None	Given that the roundhouse has largely been destroyed, no further action is recommended. The site may

			warrant inclusion on a local list, depending on locally devised criteria.
2853	Great Holland Smock Mill Base	None	Carry out internal inspection of the smock base, recommend for local listing,
28430	Toppesfield (Gainsford End) Tower Mill		Maintain current listing.
177	Debden Tower Mill	Grade II	Maintain current listing.
37772	Great Dunmow Tower Mill	Grade II	Maintain current listing.
36768	Throws Mill Roundhouse	Grade II	The site may warrant inclusion on a local list depending on local criteria. Listed building description should be updated.

6.4 Sites of National Significance (***)

All the mills in this category already enjoy statutory protection though listing both at Grade II. From this group of eight windmills, there is one Smock Mill and seven Tower Mills. A number of features set these windmills apart from the others. They are mostly all structurally complete but not internally. Some important for extent to which their technology, spatial layout, fixtures and fittings survives, as seen at the smock mill at Baker Street (EHER 35154), which is the best preserved combined wind and steam mill in Essex. Rayleigh Tower mill has been restored and is used as a museum, but does not have the same level of surviving machinery.

Most of these windmills have not been adversely affected by unsympathetic alterations. Although converted to residential, many original features at Messing Maypole Tower mill (EHER 8199) still survive and the machinery still exists, although not in its original place. Many windmills in the category have not been converted to residential or commercial, and are maintained by their owners and local communities. The windmill at South Clavering (EHER 35727), though capped and generally well-preserved externally, is now devoid of its floors and contains no machinery. The structure is located on private property and is well maintained, and has not been converted to residential. The windmill at North Clavering is in a similar condition, but has some surviving machinery.

EHER No.	SITE NAME	CURRENT STATUS	RECOMMENDED ACTION
35154	Baker Street Smock and Steam Mills	Grade II	Upgrade to Grade II*
29420	Gibraltar Tower Mill	Grade II	Possibly the most enigmatic and oldest windmill in Essex. We would recommend re-listing to Grade II*.
8199	Messing Maypole Tower	Grade II	Maintain current listing.

	Mill		
26377	Rayleigh Tower Mill	Grade II	Maintain current listing.
35729	Clavering (North) Tower Mill	Grade II	Maintain current listing.
35727	Clavering (South) Tower Mill	Grade II	Maintain current listing.
4364	White Roding Tower Mill	Grade II	Maintain current listing.
29888	Terling Smock Mill	Grade II	A full internal building survey should be undertaken to see what machinery remains, if any.

6.5 Sites of Major National and International Significance (****)

This category includes the premier examples of both post mills and tower mills in the county. The group of ten comprises of seven post mills and three tower mills. All are assessed as having major national or international significance bases on the completeness of the windmills and their technology, their architectures, historic association, group value or innovative design. All enjoy statutory protection through listing at Grade I, Grade II, Grade II*, or as scheduled monument. The post mill at Bocking (EHER 28005) and Stansted (EHER 36559) has both a listed designation and is scheduled. It is suggested that in both cases the scheduled status is removed for consistency.

Conversion to residential use is not a feature in this group, and most windmills are in the care of Essex County Council or Private Trusts, and benefit from care by local people. This has been a major influence on protecting the historic integrity of the windmills. Ashdon Post Mill (EHER 35475) is under the care of a private Trust and is very well maintained in working order. At Bocking (EHER 28005), Aythorphe Roding (EHER 37194), Stock (EHER 5429), Mountnessing (EHER 5343) and Finchingfield (EHER 29267) are owned by Essex County Council and are well preserved in excellent condition for public enjoyment. Thaxted Tower Mill has been restored to full working order by Thaxted Parish Council, and is maintained in excellent condition. The windmill at Stansted is used by the local scouts and holds pride of place in the community. Its sails are regularly turned and it is operated and maintained by local volunteers.

Most of the windmills in this group maintain much of their original machinery and have benefitted from dedicated conservation and restoration programmes. For example, the windmill at Mill Green (EHER 26612) is in private ownership and is very well maintained. The only other windmill in this category which is in private ownership is Ramsey windmill (EHER 3391). Unfortunately this post-mill is situated in an exposed location near to the sea and requires very frequent maintenance. The windmill is now on the Heritage at Risk Register, but talks are underway to devise a strategy to protect this significant site.

EHER No.	SITE NAME	CURRENT STATUS	RECOMMENDED ACTION
28005	Bocking Post Mill	Grade I, Scheduled Monument	Maintain Current Status as a listed building, but remove Scheduled status. Listed building description needs updated.
29267	Finchingfield Duck End Windmill	Grade II	Upgrade listing to Grade II*
26612	Mill Green, Fryerning, Post Mill	Grade II*	
3391	Ramsey Post Mill	Grade II*	Maintain its current Grade II* listing
37194	Aythorpe Roding Post Mill	Grade II	Maintain Grade II status.
5429	Stock Tower Mill	Grade II*	
36559	Stansted Tower Mill	Grade II and Scheduled Monument	Maintain current listing, but remove Scheduled status.
1411	Thaxted Tower Mill	Grade II*	Maintain current listing.
35475	Ashdon Post Mill	Grade II	Upgrade to its listed status from Grade II to II*, listing building description needs updated.
5343	Mountnessing Post Mill	Grade II*	Maintain current listing. Given the significance of the mill, future proposals to convert it to residential use should be discouraged.

6.6 Designations

Of the 42 sites assessed during the survey of windmills, 21 (50%) are listed and two also have scheduled monument status. There are 14 Grade II, six Grade II* and only one Grade I. Ten listed windmills (or windmill remains) are in a conservation area and two are protected by location in a conservation area alone. A further 21 windmill sites have no statutory protection. Of those 21 sites, four were graded 0 as their remains had been completely demolished. Of those 17 windmills with physical structural remains, two are protected by being located in a Conservation Area; Thorpe-le-Soken roundhouse (EHER 3038) and Bulmer Smock Mill base (EHER 47486). In total, there are ten windmill sites currently in a Conservation Area.

If designation is examined by building type, all of the six standing post mills surveyed are listed. There are three Grade II listed windmills, one Grade I listed windmill which is also scheduled and three Grade II* listed windmills. Of the thirteen roundhouse remains, only two are listed at Grade II. Only two complete Smock Mills survive and both are listed at Grade II. Of thirteen surviving Tower Mills, all are listed. Ten are listed at Grade II and the remaining three are listed at Grade II*.

Based on the figures, above it is clear that current levels of designation for standing and mostly complete windmills are robust. All 21 standing windmills are listed. However, only one post mill round house is listed (Matching Tye, EHER 33784). The difficulty in listing roundhouses is that they are relatively common and in many cases post-dated the windmill. They generally do not meet the criteria for listing and it is only those in particularly interesting architecture which are listed. The same is true for Smock Mill bases; only Frosts (EHER 26195) is listed as it survives in very good condition and is of architectural interest.

Taking into consideration the numbers of post mill round houses and smock mill bases that are converted to residential use or in use as domestic storage, and the impact this has on their historic integrity of this finite resource, recommendations will be made for three sites to be listed at Grade II. It is also recommended that many of those surviving should be added to a local list. It has also become apparent that some listed building descriptions should be updated. Like the watermill descriptions, most do not include details regarding modern alterations undertaken during or after conversion, including the removal of machinery.

7 Recommendations

7.1 Recommendations for Listing

The following two structures are recommended for listing at Grade II, due to their regional and national importance.

Belchamp Walter Post Mill Roundhouse and Trestle, Braintree District (EHER 6871)

Belchamp Walter Post Mill Roundhouse still contains the original trestle and the only example remaining other than beneath standing post mills. Its discovery brings the total of Essex post mill bases to 8, alongside Ashdon, Aythorpe Roding, Bocking, Finchingfield, Mill Green Fryerning, Mountnessing and Ramsey. The trestle has survived by good fortune, as the previous farming owner understood the mill was listed and decided against demolition. The trestle frame is intact and complete, but the vertical post (smaller and lighter than Finchingfield) has been cut short above the round house roof. The adjoining bread oven shows this mill survived as a bakers premises; an important theme representative of Essex rural mills. This site could make a good candidate for local listing, depending on local criteria.

Bulmer Smock Mill Base, Braintree District (EHER 47486)

Surviving brick-built base from Bulmer or Ballingdon Smock Mill. Technically in Bulmer parish but traditionally known as Ballingdon Mill. Octagonal, good fenestration and complete with original stone floor and timber hurst of 11in. square pine posts, designed to carry the weight of the stones. Brickwork stepped externally with 12 steps in 70 courses. Not currently listed, but listing at Grade II recommended in view of the good state of preservation and notable architecture. This will also bring into line with the Smock Mill Base at Frost's Mill, Halstead, already Grade II listed.

7.2 Recommendations for re-grading

As a result of information gathered during the project, particularly with regard to inaccuracies in existing list descriptions and the comparative importance of surviving technologies, recommendations will be made for four sites to be re-graded.

Ashdon Post Mill, Uttlesford District (EHER 35475)

Post mill and roundhouse. The second oldest post mill in Essex dating from 1763. Typical rural post mill serving a small local farming community. Restored and saved from progressive deterioration by local fund raising. Contains one of the remaining wooden windshafts in Essex post mills, the other being at Finchingfield. Winding by tail pole. Now meriting an upgrade to its listed status from Grade II to II* bringing the mill into line with Aythorpe Roding Post Mill and Mountnessing Post Mill.

Baker Street Smock Mill, Orsett, Thurrock District (EHER 35154)

Exceptionally well restored smock mill containing much of the original working machinery and with sails regularly turned. The existing Statutory List Description refers to the mill before restoration, whilst it was still in a dilapidated state. Now the only example of a working smock mill with sails remaining in Essex, the sails at Terling smock mill having been removed in the 1990's. The smock mill and adjoining steam mill, although a house conversion, retain full sets of stones, and working machinery. The steam mill comprises A-frame steam engine by Middleton of Southwark without beam, but complete with piston rods, flywheel, piston, boiler tentering gear and timber bridge trees.

The unusual completeness of the smock mill alone merits regarding to Grade II* but taken together with the steam mill Baker Street Mills become a site of national importance and the whole complex is recommended for listing at Grade II*.

Finchingfield Post Mill, Braintree District (EHER 29267)

Post mill and roundhouse. Also known as Duck End Mill. Well known and much photographed example of the most primitive type of post mill. Built c.1756. Trestle shows tarring of timbers consistent with exposure before construction of the roundhouse in 1804. Smallest remaining of the Essex post mills. No machinery but located in an important historical landscape and provides a focal point when viewed from the stream. Upright post slightly larger diameter than that at Belchamp Walter.

Upgrade to Grade II* in view of importance in historical landscape.

Gibraltar Mill, Great Bardfield, Braintree District (EHER 29420)

The unusual and complex history of this mill merits further research. The only tower mill in Essex to be located on a mill mound, the relationship of the structure to the site remains unclear. Constructed at least half a century before other tower mills in the county, the mill may originally have been constructed as a smock mill at the end of the seventeenth century. If so, it could be of national historic importance as an isolated example of a Dutch type. The mill mound is also of considerable interest as both this site and Great Bardfield water mill, destroyed by fire in 1994, were formerly in manorial ownership. The windmill has been restored and carries a full set of sails and a cap winding gear installed in 1904.

Recommend upgrade From Grade II to Grade II*.

7.3 Changes to Listed Building Descriptions

Aythorpe Roding Post Mill, Uttlesford District (EHER 37194)

Distinctive improved post mill and roundhouse; improved with automatic winding gear and containing externally driven steam mill and cast iron hurst. Largest buck of all the Essex post house mills and also features the largest roundhouse. Typical rural post mill possibly with feudal origins, located in the midst of extensive arable tillage in a cereal growing area. Automatic winding gear consists of a fan tail mounted on the steps which engages with worm gear causing wheels to run on a circulate granite track. Only surviving Essex example of this winding gear with a Suffolk and Norfolk derivation. In County Council care.

Bocking Post Mill, Braintree District (EHER 28005)

Post mill winded by a tail pole, but the substructure is located within a two-storey roundhouse which is a common feature of Suffolk post mills. The oldest post mill in Essex, with evidence suggesting a construction date of 1721. The mill was moved about 200 yards to its present site in 1830. Moving post mills to maintain good wind exposure was a common occurrence and this mill is representative of that historical practice. First windmill in the United Kingdom to be taken into public ownership, in 1928, hence the unusual Grade I designation. At this time it had been a working mill. Had it remained in use the internal staircase linking the roundhouse with the buck would not have been constructed. The bodies on all other preserved Essex post mills are entered the conventional way by means of the rear staircase. Internal machinery intact including the wooden brake wheel which some authorities consider could be the oldest part of the mill. In District Council care.

7.4 Recommendations for Local Lists

A number of windmill remains that are not statutorily listed but which are clearly significant remains with local importance should be considered for local listing. Although not a statutory designation, presence on a local list would allow important local heritage sites to be considered favourably in the planning process. Depending on how the local authority chooses to adopt local lists within their planning frameworks, there is potential to help protect significant remains from future negative development. As local lists can cover a range of heritage assets from standing buildings, archaeological earthworks and even landscapes, they are an ideal way to ensure that significant windmill remains that are not eligible for statutory listing are given some additional protection through the planning system.

District	EHER No.	SITE NAME	Current Use	Type
Braintree	47476	Giffins End Roundhouse Remains	Garden feature	Post Mill
	47486	Bulmer Smock Mill Base	Residential	Smock Mill Base
Chelmsford	47634	Chatham Green Post Windmill Roundhouse	Commercial	Roundhouse

Colchester	47642	Mayland, Mr Cardinals Mill Roundhouse	Commercial	roundhouse
Tendring	3038	Thorpe-le-Soken Post Mill Roundhouse	Residential	roundhouse
	2853	Great Holland Smock Mill Base	None	domestic
Epping	47636	Orsett Post Mill Roundhouse	Residential	roundhouse
Uttlesford	38145	Site of Welford's Windmill	Residential	Post mill roundhouse
	251	Wimbish Tye Green Smock Mill Base	Residential	Smock Mill Base
	36768	Throws Mill Roundhouse	Residential	Roundhouse
Thurrock	1883	Horndon-on-the-Hill Post Mill Roundhouse	Garden feature	Roundhouse

Figure 17 Recommendations for local listing

7.5 Buildings at Risk

Ramsey Post Mill, Tendring District

This is the tallest post mill in Essex. The two storey roundhouse is distinctive of the Suffolk type of post mill. It was moved in 1842 from Woodbridge in Suffolk by well known Wickham Market millwrights Whitmore & Binyon. The mill occupies a commanding landscape position over the Stour estuary. However, the condition of this mill gives serious cause for concern. Extensively restored in the 1970's the buck of the mill is reinforced with steel framing. However, externally the weatherboarded timber housing, the stairs and the sails are deteriorating and rotting due to lack of maintenance and requires further restoration. The wooden surfaces generally are no longer protected by paint. Warning notices have been erected on the doors and stairs. Ramsey Post mill is already currently listed at Grade II*.

8 Discussion

Through on-site assessments of the buildings and earthworks, external character, features, architecture and in some cases technology, an appraisal of their relative historic and architectural significance of windmill remains in Essex has been completed. The survey assessed some 42 windmill sites. Mill mounds and cropmarks assessed are discussed in previous sections and are not included in this discussion.

Of the nineteen surviving post mill remains, twelve are represented only by roundhouses. The strong survival of roundhouses compared to post mills, is that they were essentially separate structures. Roundhouses acted as a screen wall

surrounding the post mill trestle, keeping it dry, protecting it from rot and creating a useful storage solution after the windmill ceased to operate. Surprisingly, one surviving roundhouse contains a complete post mill trestle (HER1883, Horndon-on-the-Hill Post Mill Roundhouse), and this rare example has been recommended for local listing. The seven complete, surviving post mills located at Mountnessing, Aythorpe Roding, Fryerning, Finchingfield, Bocking, Ashdon and Ramsey vary considerably in age and type, and defy classification. Ramsey and Bocking differ from the others in that the roundhouse is double story and structurally important.

The earliest surviving recorded post mill in Essex (EHER 4098, Moreton Mill – now demolished) was built as late as 1694 but may have been moved to Essex from an earlier location in Hertfordshire. The inscribed post, dated 1715, survives in Colchester Museum Store. The earliest reference to an Essex windmill is in 1202-3, at Henham in Uttlesford. There are sixty documented references (Farries Vol.1, 103) to windmills in Essex for the period 1200-1350, for which the parish or manor are stated but the exact location is not known. No earlier windmill remains are known in the County, and the structures that were mounted on surviving mill mounds, possibly from earlier periods are completely unknown.

There are few partially demolished tower mills in Essex, only masonry bases from smock mills that formerly held timber superstructures. Tower mills are most common in the north-west of Essex, while smock mills were more common in the south. Unfortunately few timber superstructures of smock mills survive. None of the base structures contain original machinery with the possible exception of Frost's Smock Mill Base, Halstead (EHER 26195), which is used as a store by the former mill owners. The number of roundhouses and smock mill bases which survive is partly due to their ability to be converted and re-used relatively simply and effectively. It is important that any proposed demolition or reuse of a roundhouse or windmill base should be used as an opportunity to record any surviving internal features.

Tower mills are the best preserved windmill types, due partly to the fact that they were erected later and were in use for longer than other windmill types. The greater size of the tower mills enabled a much higher level of productivity and there are no fragmentary remains of tower mills.

As with watermills, demolition of windmills in the first half of the twentieth century was common. The survival of milling machinery is normally as a result of a deliberate conservation policy and in the case of working mills have been subject to rebuilding and replacement of worn out technologies with new reliable components but using traditional methods and materials. In the case of the seven restored windmills in County Council care, original replaced components are retained within the round houses.

Twenty-one sites already enjoy statutory protection though listing, two are Scheduled and 14 lie within conservation area. In total, 55% of windmill remains are protected though statutory designation. No windmills are currently on a local list, but 15 have been suggested, four of which are mill mounds. All standing windmill remains are covered by some form of designation, while roundhouses and smock mill bases are less likely to be covered, depending on the nature of their survival. Based on these figures it is clear that the current levels of statutory protection covering standing

windmills is robust and mostly sufficient. More protection could be given to roundhouses, smock mill bases and mill mounds through local listing, and in some cases through statutory designation.

Based on assessments made during field survey, four windmills are recommended for re-grading to Grade II* and two other partial windmill mill structures are recommended for listing at Grade II. While many of the mills still enjoy statutory protection, many of these buildings do not retain many of the original fixtures and fitting for milling apparatus. In many cases the milling machinery was sold off for scrap after the mills closure or re-used.

Figure 19 (below) shows the distribution of windmill reuse by district, as recorded during the field survey in 2011. The fields recorded represent the Residential conversion, commercial/business use including office, light industrial, Cultural which relates to those which are open to the public for visits or used as museums and Other, comprising unused or derelict.

DISTRICT	Post mills	Post mill Roundhouses	Smock mills	Smock Mill Bases	Tower mills	District Total
Braintree	2	2	1	4	2	11
Brentwood	2					2
Chelmsford		1			1	2
Colchester		1			1	2
Epping		1		1		2
Rochford					1	1
Tendring	1	1		1		3
Thurrock		2	1	1		4
Uttlesford	2	4	0	2	7	15
TOTAL	7	12	2	9	12	42

Figure 18 Distribution by District and type

Of 42 windmill remains, 17 have been converted to residential use and 6 are in commercial use Conversion tended to lead to the removal of machinery and alteration of fixtures and original features. Conversion to residential use in particular, can be damaging to the historic integrity of the building. Most of those windmills converted to residential use are post mill roundhouses; often they are used as as domestic storage as part of private residences. Such sites include Bulmer Smock Mill base (EHER 47486), Matching Tye Post Mill (EHER 33784). Orsett Post Mill Roundhouse is currently used as a private gym, and is maintained in good condition. Belchamp Walter Post Mill (EHER 6871) is currently disused, but is well maintained and preserves original machinery and fixtures. Gibraltar Tower Mill (EHER 2942) forms part of a modern dwelling and has suffered some conversion, but the external historic integrity of the windmill remains intact. The roundhouse at Maylands (EHER 47642) forms part of a bakers premises.

Other includes some roundhouse bases and smock mill bases that are almost completely demolished. The foundation walls of some of these are used as the garden features to house flowerbeds, such Giffins End Roundhouse Remains (EHER 47476).

DISTRICT	Residential	Commercial	Cultural	Other	TOTAL
Braintree	7	0	2	1	10
Brentwood			1	2	3
Chelmsford	1	1	1		3
Colchester	1	1			2
Epping	2				2
Harlow					0
Maldon					0
Rochford					
Tendring	1	1		1	3
Thurrock	1	1		2	4
Uttlesford	4	2	4	5	15
TOTAL	17	6	8	11	42

Figure 19 Windmill re-use by District 2011-2012

Those windmills which are in cultural use are in the care of Essex County Council or Private Trusts. This has been a major influence on protecting the historic integrity of the windmills. Ashdon Post Mill (EHER 35475) is under the care of a private Trust and is very well maintained in working order. At Bocking (EHER 28005), Aythorpe Roding (EHER 37194), Stock (EHER 5429), Mountnessing (EHER 5343) and Finchingfield (EHER 29267) are owned by Essex County Council and are well preserved in excellent condition for public enjoyment. Thaxted Tower Mill has been restored to full working order by Thaxted Parish Council, and is maintained in excellent condition.

A study of Farries Volume 3 identified 45 new demolished windmills sites and showed that five of these had some crop mark evidence on the ground today. Although assessment of Farries revealed a large number of new sites, analysis shows that the survival of the windmills recorded by Farries in the 1970's has not changed significantly. This may reflect the increased awareness of windmills being seen as important heritage assets, with many of them being given statutory protection. Standing windmills are not significantly threatened with demolition, since most are in some form of use. Those that are currently unused are given some form of statutory protection and, those that in Essex County Council ownership are monitored by the Essex Mills Team and a number of volunteers. The main threat facing standing windmills is the lack of funding for maintenance and repairs. The windmill at Ramsey has been placed on the Buildings at Risk register while funding is sought for urgent repairs. Some standing windmills are owned by local authorities, while others are in residential use. Whilst re-use is preferable to demolition or chronic dereliction, proposed schemes for conversion of re-use need to be fully informed at an early stage through the use of historic buildings impact assessments to ensure future design proposals are sympathetic to the fabric of the building, its surviving technological and spatial integrity.

Complete mills in workable condition, whether post, tower or smocks are now a considerable rarity and just a handful remain across the County. These comprise Ashdon Post Mill, Aythorpe Roding Post Mill, Baker Street Smock Mill, Mountnessing Post Mill, Stock Tower Mill and Stansted Mountfichet Tower Mill. In the future, should well-meaning individuals wish to restore other remaining mills to working order they

will face a challenge in preserving authenticity. Nevertheless the huge archive of historical photographs of Essex Mills held by the Essex Record Office would provide the raw data for restoration to original working condition. This was achieved at Stock which was restored from a shell to its present state by the County Council in the 1980's

Whilst in an ideal world, the remaining unaltered windmills would be restored and brought back to working condition, the financial investment on part of the owner without significant public subsidy is both too onerous in the first part and without significant financial reward i.e. windmills as museums or curios that open for a few days a year are much less attractive than conversion. Essex is in a lucky position in that mill enthusiast groups maintain most of the better windmills, and it may be suggested that to secure the future of the likes of Ramsey that the onus is placed on organisations such as English Heritage, Local Government or Independent Trusts to take a custodial role and save these important buildings. Unfortunately, given the major financial strains on these organisations, it is more important than ever to seek alternative funding and for local communities to find ways of campaigning for the preservation of heritage assets in their local areas. Initiatives such as Local Lists can have an important role in raising public awareness of their local heritage and promoting the importance of these buildings.

Essex has a huge number of post mills from the earliest period of windmill evolution but regrettably most of these had fallen from use and collapsed through neglect by the end of the First World War. Some post mills, particularly in Uttlesford district, had been replaced by more profitable tower mills and the greatest concentration of surviving tower mills in Essex can be found in that district. The majority have had their sails removed and replaced with capped shells. It is important that the statutory protection for listed windmills is upheld and adhered to, that their character is not eroded through 'gradual' change and that the best examples remain in their present original conditions and are not compromised by unsympathetic proposals for residential or other use.

While windmills can be protected through the planning system, can be conserved or taken into Trusts, they are increasingly facing threats caused by climate change. The effect of global warming on weather patterns with increasing rainfall, flooding and potential sea level rises will all have a significant effect on windmills and all heritage assets in the region. Increased extremes of wetting and drying, which heighten the risk of ground subsidence and accelerated decay of stonework poses a threat to many buildings.

9 Conclusions

The vast majority of windmills in Essex were demolished in the early twentieth century. The remaining windmills in Essex are fragmentary but nevertheless offer good examples of the variation in structure and operating features historically found within the County. As well as seeing the slow evolution of the post mill from its medieval origins, Essex saw the widespread adoption of tower mills and smock mills, a windmill type now more associated with Kent.

This report has shown the difficulties in assessing cropmark evidence to identify windmill sites. Even when comparing cropmarks, cartographic and landscape features alongside historical documentation, it is difficult to differentiate windmill sites from other types of circular cropmarks. Assessment of cropmarks alongside known demolished windmill records was however very useful, and five cropmarks could be positively reinterpreted as windmill sites that were recorded but not accurately located by Farries.

Whilst the majority of standing windmills enjoy statutory protection, just under two-thirds of those visited were not inspected internally. As has already been touched upon, many of the listed building descriptions are no longer accurate; all the sites identified should be internally assessed so that appropriate future management strategies, based on a fully informed appraisal of significance, can be instigated. Of 42 windmill remains, 17 have been converted to residential use and 6 are in commercial use.

This report has shown that distinguishing between mill mounds and other types of archaeology can be fraught with difficulties. Assessment of 14 mill mounds out of a total of 76 highlighted that the size and morphology of windmill mounds, barrows and mottes can sometimes be very similar. Assessment of cropmark windmills shows that like mottes, it was also common for windmill mounds to have a surrounding, interrupted ditch. The survival of mill mounds is generally quite good despite only 2 out of the 14 mounds assessed being protected through scheduling. Five were considered to have 'good' survival, 5 were considered 'very good' and 4 were considered 'poor'.

10 Recommendations for Future Research and Policy

This study has shown the difficulties of interpreting earthwork mounds. There are 76 sites recorded as 'mounds' on the EHER where the specific nature of the mound has not been identified. It is possible that some further analysis in conjunction with cartographic sources, Farries, placenames, cropmarks and associated archaeology could help to further define these monuments.

It is clear that the distinction between 'mill mounds' and 'mottes' is not clear cut and that much more work is needed. Due to this, it would be pertinent to ensure that all potential mill mounds are given some form of protection in the planning process. Only seven known windmill sites have been excavated in Essex, and there is little consistency in the nature of the evidence. More investigation is needed to allow positive investigation of these sites. It has been assumed that mill mounds most likely indicate post-medieval windmill sites, but evidence suggests that an earlier medieval date is more likely.

Deciphering when a mill mound was erected, and whether it had an earlier, prehistoric date is incredibly different without excavation. At Takely, trial trenching from the top quarter of the mound produced a large amount of medieval pottery, of c. C12-13 date. The site is the only known surviving medieval mill mound in Essex, and may have regional or even national significance.

Great Bentley, Little Bentley and Boreham did not reveal any indications of crosstrees through aerial photography, nor through trial trenching. This may be due to the limited nature of trial-trenching. The positive identification of windmill mounds would enhance

our understanding of windmills in Essex and open up the possibility of identifying new settlement sites that may be associated with the medieval mounds, such as settlements. A detailed assessment of mill mound morphology would be useful to understand the nature of the earthworks and to help distinguish between mottes and mill mounds. The identification and conservation of windmill mounds therefore goes beyond spatial and typological study, to the identification of possible medieval or prehistoric sites.

Several research themes have emerged from the study amongst which is the degree to which primary power sources in wind and water mills were supplemented by steam and later by internal combustion in the course of the C19. The Farries archive included a detailed study of the introduction of steam as an auxiliary power source into existing Essex mills, both water and wind, and the various dates of introduction of new steam driven mills. This process of adoption was a result of engineers working closely with Essex millers. The process could be traced in detail using a study of surviving mill remains and records, enhancing the HER with a new level of understanding and detail, with the milling industry receiving a more holistic industrial approach.

Similarly, corn milling as an industry worked closely with suppliers, farms, corn factories and with customers, largely bakers, resulting in integrated enterprises. Marriages, whose publication is listed in the secondary literature, ran an integrated enterprise embracing arable farms, water mills, wind mills and eventually a highly successful urban steam mill. Large roller mills, cheap import of corn and industrial sized roller mills, led to the demise of many small enterprises and local post mills, such as Bocking Church Street, West Mersea and Woodham Walter, were owned by village bakers. Many millers owned both post and tower mills, as well as water mills.

Identifying early medieval windmill sites has the potential to reveal evidence about early medieval settlement patterns in Essex. The windmill at Boreham was associated with a medieval farmstead with domestic housing.

Other themes that were noted after the survey and could be investigated further include:

- i. Relationship of wind milling to steam power transmission
- ii. Relationship to baking industry
- iii. Ownership of mills by bakers
- iv. Relationship to farming
- v. Relationship and joint ownership with water mills
- vi. Enterprise – Millers and commodity distribution (Corn, coal)
- vii. Influence of individual millwrights and surviving works
- viii. Farries collection

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12 Appendices

12.1 Appendix 1: Glossary of Terms

BODY/BUCK	The moveable chamber of a postmill which contains the machinery.
CAP	The revolving top of a smock or tower mill supporting the sails, windshaft and fantail .
CROSSTREES	Horizontal timbers at right angles which support the centre post of a post mill
EYE	The centre hole in a millstone. In the runner millstone the eye is always round and in the bed stone the centre hole may be either round or square depending upon what type of millstone bearing housing is used.
FANTAIL	A vertical fan of six to eight vanes which automatically operates the mechanism to turn the cap and keep the sails facing into the wind.
FRENCH BURR STONES	Millstones made of interlocking blocks of chert - a form of flint and very hard - which used to be quarried near Paris. The blocks are held together by iron hoops and Plaster of Paris
HOPPER	An open topped container tapered to feed grain into the millstones .
MAIN POST	Large fixed vertical timber post weighing about one and a half tons, with a pintle at the head on which the body of a post mill pivots to be faced into the wind
MAIN SHAFT	A vertical shaft from wallower to spur wheel .
MILL MOUND	An artificial mound of earth indicating either the former site of a windmill or built as the base of a post windmill.
WINDMILL	A tower-like structure of wood or brick with a wooden cap and sails which are driven around by the wind producing power to work the internal machinery.
POST MILL	A type of windmill, mainly timber-framed, whose body, containing machinery and carrying the sail, rotates about an upright post.
SMOCK MILL	A windmill with a stationary timber body which contains the grinding machinery, and which supports a rotating cap in which the sails rotate.
TOWER MILL	A windmill with a rotating cap containing the windshaft , and a stationary body in the form of a tower.
MILLERS HOUSE	The residence of a miller, often attached to a mill.
MILLSTONES	The pair of stones which grind the grain.
ROUND HOUSE	A circular or octagonal building at the base of a post mill to provide storage space and to give protection to the superstructure. The roundhouse is not attached to the mill itself. Some roundhouses were later converted for domestic purposes.

CROWN TREE	The main timber which rests and pivots on the post and carries the weight of the body .
CROOK STRING	Cord by which the inclination of the shoe is adjusted.
SHOE (OR SLIPPER)	Tapering wooden chute or tray which conducts the grain from the hopper into the eye of the stones.
BRAKEWHEEL	Huge gear which drives a tower mill , contained in the cap
WALLOWER	Smaller, horizontal gear that interacts with the Brakewheel on the upright shaft of a tower mill
SAILS	The Sails are the source of power in a windmill. They are carried on the Windshaft .
SPUR WHEEL	The main driving wheel.
STRIKING GEAR	Mechanism to open and close the shutters on the sails
TAIL	Rear end of a post mill
TAIL POLE	Long timber at the rear of a post mill or cap used to turn it manually
TENTERING GEAR	The mechanism for setting the initial gap between the millstones .
TRESTLE	The supporting base structure to a post mill .
PINTLE	The pivot centring a post mill on top of the main post.
PINION	A pinion gear consisting of round staves or rungs mortised between two discs, used either as a wallower, or as a millstone pinion or nut.
RUNNER STONE	The Runner Stone is the topmost of a pair of millstones .
STONE NUT	A pinion wheels mounted on a spindle which are moved into gear with the great spur wheel to drive the millstones
WINDSHAFT	The Windshaft carries the Sails and also the Brake Wheel (Smock and Tower mills, and in some Post mills) or the Head Wheel and Tail Wheel in a Post Mill.
WEATHERBOARDING	The overlapping shaped timber planks covering the framework of a post mill body, smock or cap
BRAKE WHEEL	The Brake Wheel is the main driving wheel in a Smock or Tower mill , and in some post mills . It is carried on the Windshaft and drives the Wallower on the Main Shaft . Connected to the windshaft this is clamped by blocks or a brake to stop the mill or slow it down. It is a large cog wheel that meshes with the wallower.
HEAD WHEEL	The Head Wheel is carried on the Windshaft in a Post Mill and has a brake around its circumference.
TAIL WHEEL	The Tail Wheel is carried on the Windshaft in a Post Mill and drives a Stone Nut .

12.2 Appendix 2 Details of information held in two boxes of the Farries Archive.

Farries Archive	
A7678 Box 1/1	
PHOTOS (Colls) MAP SURVEYS	
ANALYSES – Mill numbers etc	
Page No	Content
1	Smock Mills Photographic record
2	Essex Windmills : List of illustrations required by K.G. Farries in connection with projected book 21/8/1971
3	Notes on windmill illustrations: ERO Portfolios 9 pp
4	Notes about book found by Adrian Corder Birch in 1985. Basil Oliver, published 1912. Old Houses and Village Buildings in East Anglia, Norfolk, Suffolk and Essex. Plate LXXVIII shows windmill at Hythe Colchester. All in National Buildings record
5	5 pages of notes about mills in National Building record
6	8 pages of notes requesting windmill copies held in Colchester and Saffron Walden museums
7	Interesting list Illustrations of Essex windmills in COULTHARD COLLECTION on loan to the SPAB in 1934
8	Notes on the T.J.M. Collection the TJM Essex Windmill album in poss. Of Martin J. Mason 1966 15 pages. Believed to be in the Passmore Edwards Museum
9	1 page photos in Leyton reference library
10	Ditto Southend library
11	various printed leaflets on published historic maps of Essex
12	14 pages of listings of tithe maps
13	14 pages taken by a student from the ERO catalogue of maps 1566-1855 with ERO references
14	22 pages of analysis of the first and second editions of 6" showing locations all windmills
15	Approx 100 pages individual detailed geographical descriptions of Essex windmills
16	Approx 60 pages millers, parish directories, historical/chronological listings
17	Detailed analyses of historic Essex maps including Morant, C&A, Woodward's 1799, Greenwood's 1825
18	Analysis and checklists of types of mill
19	Analysis of 1" 1893 and comparison revised 1st edition 1840
20	Schedule of post mills. Dates of cessation of work by wind
21	Mill appearances by map and date
22	The introduction of steam - an analysis
23	Analysis 1750-1880 numbers of mills by type created on new sites; peak years 1791, 1809, 1812
24	Late appearances
25	Possible removals
26	6 pp appearances and disappearances
A7678 Box 1/2	
MILLERS	

1	Note on Wind as a motive power; extracted from The Essex and West Suffolk Gazette 1/10/1858
2	Correspondence from G.W.Martin Clacton on Sea
3	12 pages extracts from trade directories
4	Introduction; note made August 1964 (See handwritten notes) GWM
5	More extracts approx 60 pages from Kellys and elsewhere
6	Miller extracts- compiled by GWM approx 100 pages
A7678 Box 2/1	
PHOTOGRAPHS	
	Photographs of mills in Packets. Under name of parish/mill name. Monochromes.
A7678 Box 2/2	
PHOTOGRAPHS	
	Second box - same as above
A7678 Box 5	
Detailed correspondence with mill enthusiast E.F.GOATCHER commenting on Goatchers interests in a large number of Essex mills	
Addendums and comments on the published volumes 1-5	
Lists of mills and dates of demolition or destruction	
Overwhelming data and moves from one mill to another across the whole county as he enters correspondents with individual enthusiasts.	
No sign yet of files on individual mills	
<u>Essex Correspondence 1981</u>	
26 names	
Mark Arman	Thaxted Mill
H.A.Wozniak	
Michael Organ	Ramsey Mill
Alan Frost	
W.R.Powell VCH	
Brian Flint	
N.Gray (County Archivist)	
D.Emmison	Correspondence re extracts from Essex Wills and the Feet of Fines 1580-1603 vol VI
D.W.Muggeridge	
Michael Short	
Ian Thearle, Copford	

Chris Hullcoop	Chairman, Suffolk Mills Group
C.C.Stevens	
Randall Bingley	Curator, Thurrock Museums re the conversion of Baker Street smock mill into a house
Ian G. Robertson	
Nick & Di ?	
G.W.Martin	
Mr & Mrs Gibson	
Peter Came?	
Paul Tritton	
M.J. Rowland	
Mr & Mrs Colbusan?	
Jesse Wightman	
Bensusan Butt	
A.F.G. Brown	
Derek Hill	
Hervey Benham	Re disappearance West Mersea roundhouse
Adrian Corder Birch	Discussed review of Farries Volume in 1984 Summer Essex Review
M.J. Rowland	
Mr & Mrs Colbusan?	
Jesse Wightman	
Bensusan Butt	
A.F.G. Brown	
Derek Hill	Content
Hervey Benham	Smock Mills Photographic record
Adrian Corder Birch	Essex Windmills : List of illustrations required by K.G.Farries in connection with projected book 21/8/1971
	Notes on windmill illustrations: ERO Portfolios 9 pp

Farries Archive	
A7840 Box 2	
Photographs (Collections), Map Surveys, Mill Numbers	
1	Illustrations for the book
2	Windmills records in ERO
3	List of maps in NMR containing Essex windmill records
4	Details of the T.J.Mason Collection in Passmore Edwards Museum
5	Handrawn map extracts by Kenneth Farries; mainly from Historic O.S.Maps
6	Dates of windmill construction for county of Essex
7	Dates of windmill disappearances for county of Essex
8	Introductions of steam technology; mills and dates (both wind and water mills)
A7840 Box 4	
Rolls of maps and charts	
1	Diagram chronological chart of construction, bankruptcies, damage by fire and lightning, blown down, introduction of steam,
2	Copies of commercial historic maps

3	Cross sectional drawing from PRO of a tower mill
4	Chart photographic record internal details Essex mills
5	Chronological bar charts of Essex mills on graph paper
A7840	
Glass plate negs are never produced but will be digitised if money and resources are made available.	
This will be one of the objectives of the Mills Archive project in collaboration	
with the Mills Archive and ERO	
Farries Archive	

Inventory

The inventory contains an individual record sheet for each site assessed during the survey. The record sheet is based on present knowledge and gives a brief site description, assesses its archaeological potential, significance and status, and identifies the need for future management and action. Sites are graded as follows:-

0	Of low or importance or demolished
*	Sites of Local Significance (low)
**	Sites of Regional/National Significance (med)
***	Sites of National Significance (med-high)
****	Sites of Major National/International Significance (high)

A current, and where possible earlier, Ordnance Survey map extract is provided for each site and at least one black and white photograph is included. The records are held in the Essex Historic Environment Record (EHER) at County Hall, Chelmsford.

Braintree District

Post mills and Roundhouses

EHER	Name	Grade
6871	Belchamp Walter Post Mill Roundhouse (Cottonbury)	**
28005	Bocking Post Mill	****
29267	Finchingfield Duck End Windmill	****
47476	Giffins End Roundhouse Remains	0

Smock Mills and Bases

EHER	Name	Grade
47486	Bulmer Smock Mill Base	*
26195	Frosts Mill Halstead	***
1567	Petit's or Day's Mill, Great Sampford	*
29888	Terling Smock Mill	***

Tower Mills

EHER	Name	Grade
29420	Gibraltar Tower Mill	***
28430	Toppesfield (Gainsford End)	**

Post mills and Roundhouses

SITE NAME Belchamp Walter Post Mill Roundhouse (Cottonbury)

PARISH Belchamp Walter

DISTRICT Braintree

NGR TL798394

EHER 6871

CURRENT STATUS Con. Area No

Listed Grade NL

EBAR No

STATUTORY LIST DESCRIPTION

The building is not listed.

KENNETH FARRIES SURVEY

Post Mill, known as Cottonbury Mill; (listed as such in the title apportionment 1847). The roundhouse stands on the north-east side of Cottonbury Cottage on the north side of the lane from North End (Little Yeldham) to the Belchamps, and in the extreme south west of the parish.

The windmill was noted by Chapman and Andre (1777), but the mill body had been removed by the time of the revision of the 2nd O.S. map made in 1893. Land tax records suggest that the windmill stopped work in 1883. The mill stood off an unfrequented lane. In its entirety it was not remembered locally in 1972, but to step into the roundhouse was to be persuaded that the mill was in position overhead, for the substructure is complete, and even carries the collar over the quarterbars. At some time the roundhouse was fitted with a bake-oven, the chimney of which survives (1974). Usually when roundhouses are retained, the slope of the roof is carried up at the same angle to be suitably capped over the sawn-off main post. Here the collar was left in situ owing to the presence of an unusual feature – a triple ring of 3in. square wood segments arranged one above the other on 13in. centres and having an internal diameter of 7ft. 10in. Outside these rings was attached vertical weatherboarding, which would have deflected most of the driving rain.

JOHN BOOKERS SURVEY

This important mill was missed by John Booker.

Present Use: Domestic Store.

Condition: Good.

ERO SOURCES: None.

SITE BACKGROUND

One of the oldest surviving post mill trestles in Essex thought to have been constructed around 1750, and with the cross trees originally exposed. The building has fortunately survived due to a misunderstanding by the previous owner that it had been Listed. The post mill body was removed between 1883-1884, the main post shortened and the roundhouse converted to a bakery. The west side of the adjoining Mill Cottage dates from 1650 according to deeds (documentation from the house owner) and the eastern continuation from 1750 which led Vincent Pargeter to suggest that the post mill could also have been constructed at that time. The roundhouse has been dated confidently to 1852.

Photographs show a high but narrow body with a mansard roof, it was removed between 1883-1893. The roundhouse roof was turned almost vertically upwards under the spout floor to exclude the weather and a deep timber skirt enabled the mill to perch even higher perhaps in order to carry the sails high above the ground. The skirt was clearly a later

addition. The mill was within 10 yards of the cottage and hence safety of people on the ground would have been of paramount importance. The mill latterly drove at least one pair of French Burr millstones, discarded pieces of which can be seen on site. The west side of the adjoining Mill Cottage dates from 1650 according to deeds (documentation is available from the house owner) and the eastern continuation from 1750 which led Vincent Pargeter to suggest that the post mill could also have been constructed at that time. A contemporary photograph shows that the mill body was high above the roundhouse. It had a mansard roof and an unusual extension to one side, presumably for the staircase. The roundhouse roof was turned almost vertically upwards under the spout floor to exclude the weather as at Cressing West.

This suggests that the sails were high off the ground perhaps to avoid risk to residents as the mill is within 10 yards of the cottage. The roundhouse itself has been dated confidently to 1852. Listed as significant mill remains in Wood 2005.

The roundhouse lies on a slight mound about 0.8m above general ground level. Within the brick building is the well-preserved base trestle of Cottonbury Mill. All elements are intact including plinths cross bars, quarter bars, main post and collar. However the main post has been cut off above the collar and the roundhouse has been roofed over.

All previously lime washed. Built on to the rear of the roundhouse is the 1901 original bakery oven 3 metres in depth complete with original cast iron fire doors opening into the roundhouse. The post is of slighter construction than that at Finchingfield although the span of the cross trees is slightly greater.

Field Survey 2011

28/04/2011

The roundhouse lies on a slight mound about 0.8m above general ground level. The brick built roundhouse contains the entire base trestle of Cottonbury Mill. All elements are intact including plinths cross bars, quarter bars, main post and collar. However the main post has been cut off above the collar and the roundhouse has been roofed over, probably during conversion to bakery premises around 1901. Repairs to the wall spacers were undertaken a number of years ago by the County Millwright, Vincent Pargeter. Some deterioration of timber work has occurred at the ends of the crossbeams and repairs are required. Internal surfaces of the roundhouse wall and the plinths are dressed in lime mortar which is being restored by the current occupiers. The trestle appears to have been lime washed – not painted as observed by Farries. Built on to the rear of the roundhouse is the oven observed from inside and the bakery chimney is still intact. Roundhouse has an intact bakery oven, 3 metres in

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C19	Brick	H
Trestle	C19	Timber	H
Bakery Oven	C19	Cast iron	M
Windmill mound	Unknown		

ARCHAEOLOGICAL POTENTIAL

Possibly a windmill mound site in use from the medieval period.

Best preserved individual post mill roundhouse in Essex set in a rural location in the north of the county. The roundhouse stands on the north-east side of Cottonbury Cottage on the north side of the lane from North End (Little Yeldham) to the Belchamps, and in the extreme south west of the parish. The trestle survives.

SITE SIGNIFICANCE

Well-preserved and rare survival of a post mill trestle and the intact bakery oven are historically-interesting features that highlight the importance of the commercial connection between country milling and bread making.

RECOMMENDED ACTION

It is recommended that in view of the excellent state of preservation of both elements the roundhouse could be listed at Grade II. In view of rarity and historical importance and the excellent state of preservation of the intact trestle structure. Owners are hoping to carry out sympathetic repairs and intend to apply for appropriate grant funding.

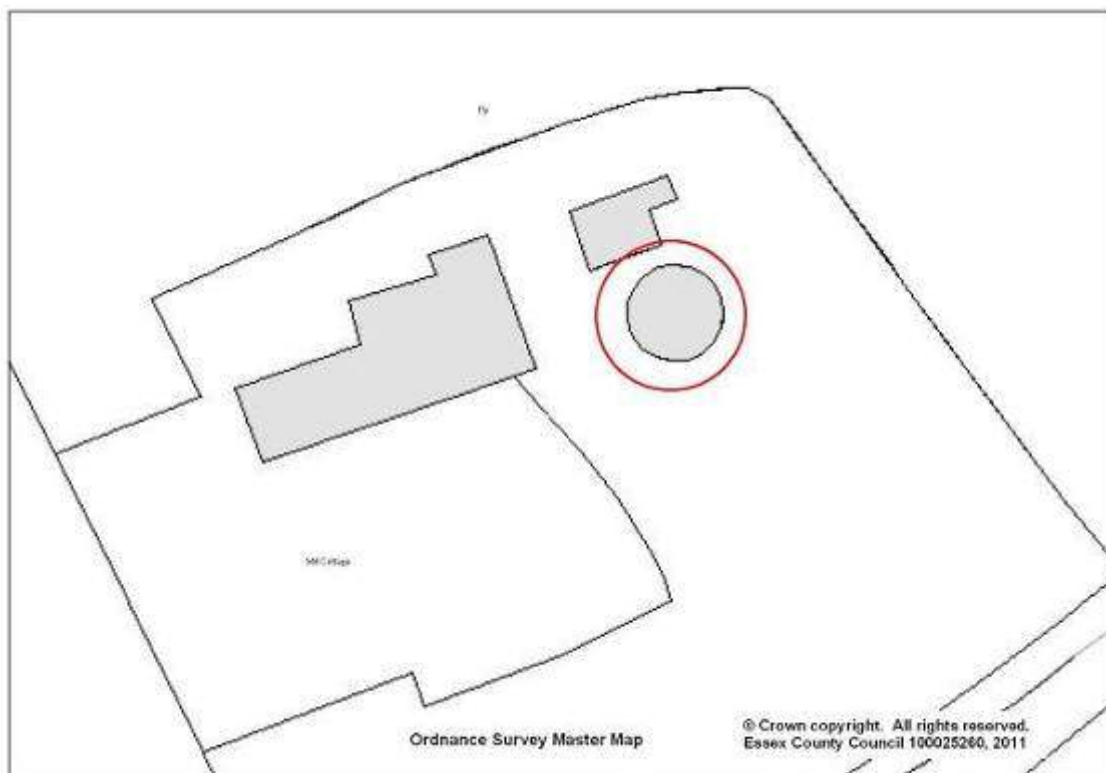
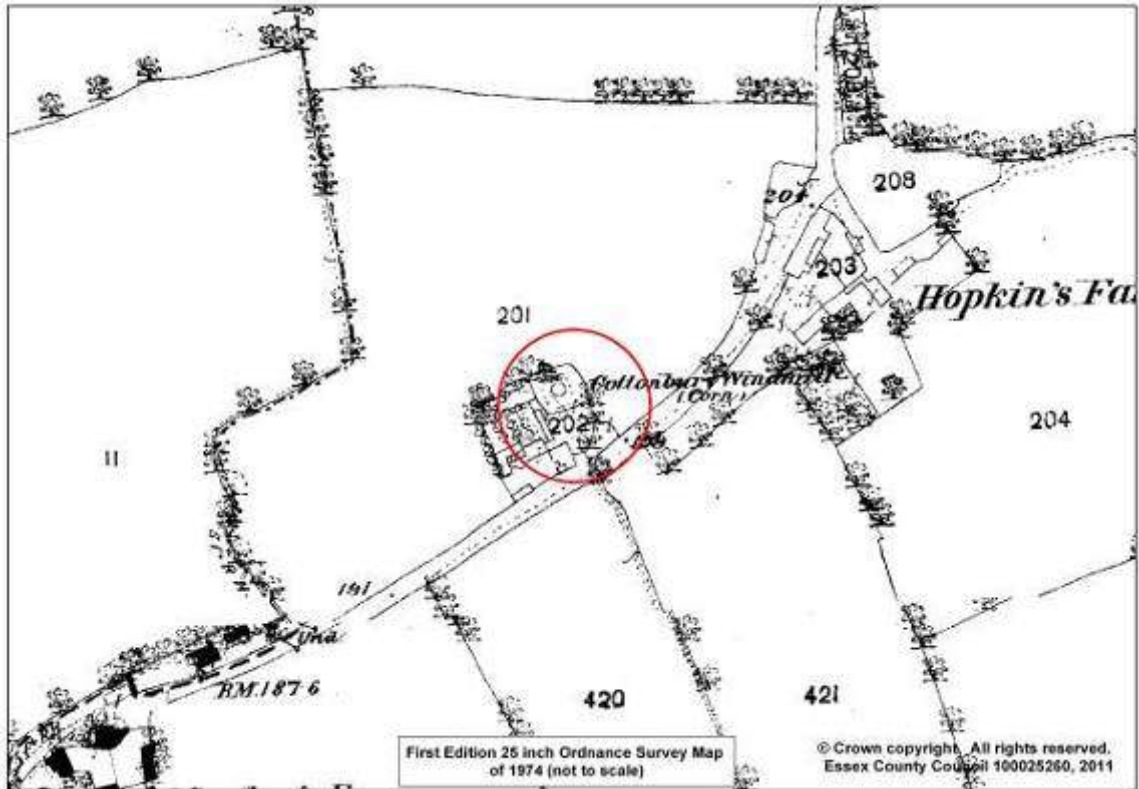
MANAGEMENT

The mill is in private ownership and the present owner is conscious of the historical importance and is maintaining the structure in good condition. If the mill becomes the subject of a planning application for residential and/or other re-use all efforts should be made to preserve its current levels of historic integrity.

GRADING **



Photograph of Belchamp Walter Post Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



SITE NAME Bocking Post Mill

PARISH Bocking

DISTRICT Braintree

NGR TL 76306 25965

EHER 28005

CURRENT STATUS Con. Area No

Listed Grade I and **EBAR** No
Scheduled Monument

STATUTORY LIST DESCRIPTION

25/10/1951

885 CHURCH STREET
(South East Side)
BOCKING CHURCH STREET
Windmill
TL 72 NE 10/62 25.10.51.

A fine post mill with sails and dating from circa 1680. It was moved to its present site in 1830 when the brick 2-storied round house base was erected. It is weather-boarded, with a tail pole and a sack hoist. It is the first post mill in the country to be taken over by a local authority as an historical monument on being given to the Urban District Council by the Tabor family in 1929. At that time the mill was in full working order.

SCHEDULED MONUMENT DESCRIPTION

A post-mill of probably late 18th-early 19th century, was moved bodily in 1850. Post 2' 7" square at base, span of sails 60'. Has fan-tail. Height 40' and post 20'. Weather boarded. A brick round-house was constructed round the base-piers in 1830. In the possession of the Taber family for four generations and handed over by E.N. Taber to the U.D.C. 23rd Nov 1929.

Restored post-mill with new sails.

KENNETH FARRIES SURVEY

Post mill. Preserved. Stands on the south side of Bocking Church Street by Miller's Close, to which site it was brought in 1830 from a point 170 yards to the west....A quoted date of building – 1680 - may be discounted by reference to... documentary evidence ...and by the character of the mill itself. The construction of 1830 was probably based on the use of parts of the old mill supplemented by new additions...The roundhouse contained one pair of stones on the upper floor, under driven by steam engine on the east side, with belt drive through an aperture in the wall. Wind drive to the stones above appears latterly to have been by one pair of common sails and one pair of spring sails having semi-elliptic springs.

JOHN BOOKERS SURVEY

21/09/1971

Restored post mill with two-storey roundhouse and tail-pole. More or less complete machinery within, but the runner stones have iron castings by 'Bear Sudbury' and 'Bear Ipswich'. Roundhouse bears painted words 'STEAM & WIND MILL GRIST GROUND ON THE SHORTEST NOTICE. OATS CRUSHED RETAILING DONE'. The importance of this mill is that it was the allegedly, the first in the country – certainly the first in Essex – to be taken over by a local authority as an historical monument. The date of the mill is open to question. The strong local opinion is that John English Tabor moved the mill about 200 yards or so east from the site shown on Chapman & Andre 1777 to the present position. There is some evidence for this (D/DO T133) and it is believed that the roundhouse dates from about 1830, the suggested date of the move. Local belief is that the mill may date from 1680 but the deeds suggest that the mill was built about 1721 and 'removed' and 'pulled down' in 1830 by

J.E.Tabor and presumably re-erected on the present site. On 23 Nov 1929, Edward Tabor presented the mill to the parish council of Bocking, the necessary repair and endowment funds having been raised by Alfred Hills, clerk to Braintree U.D.C. and a historian of Essex mills. In 1962 a further fund for renovation was launched by the chairman of Braintree and Bocking UDC., repairs were done by Noble & Sons of Ongar and the mill was reopened as a monument and museum in November 1964. A committee was formed to administer the mill and members of the public invited to subscribe to become 'friends of the windmill'.

Present Use: Preserved

Condition: Good

ERO SOURCES: ERO

D/DO T133 Deeds 1733-1855

D/DTa T11 1721 Deed of site for erection of windmill

D/DTa A10a 1829-1840 J.A. Tabor papers

D/F 21/25 pp 359, 360 Note of working by portable steam engine

OTHER SOURCES:

D. Smith 1932 English Windmills, Vol. 2. pp. 42,45

R. Wailes 1958 Essex Windmills, Trans. Newcomen Soc. Vol XXXI

Essex Mills Group Newsletter 33 July 1996

"Our first stop was the original site (1721-1830) of Bocking post mill. The bakery on the site had only fairly recently become disused ...there was a large bread oven with a very impressive cast iron door and a very long "peel" for putting loaves into the oven and removing them after baking. ...At the top of the garden, a well winded site is the remains of what is taken to be the windmill mound, degraded and apparently housing an air raid shelter during the 1939-45 war."

SITE BACKGROUND:

This mill, one of eight which stood in Braintree and Bocking, was once thought to date back to 1680 but there is now fairly conclusive evidence that it was built in 1721, making it the second oldest surviving windmill in Essex. Bocking Church Street Windmill is one of the many post mills which have been moved, in this case over a distance of about 160 metres (170 yards) eastwards. Members of the Tabor family owned the mill from the eighteenth century right through to 1929. Family opinion was that the mill was moved because it became masked by cottages built early in the C19. The improvements included the provision of two pairs of stones in the head. In 1898 a pair of steam driven stones were installed in the roundhouse to allow milling to continue on calm days. When milling by wind, the power was supplied by two shuttered spring sails and two cloth covered commons.

Field Survey 2011

28/05/2011

The mill is located on the edge of the village with views open to the east and south. The mill is regularly maintained by Braintree District Council working in conjunction with the Bocking Mills Group, a volunteer organisation set up in the 1964 to open the mill to the public. Access to the buck of the mill is unusually by internal ladder taken from the round house and through an opening that has been made in the floor of the buck.

Present Use: Preserved mill open to the public in Local Authority ownership.

Condition: Reasonable condition with some maintenance work necessary.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post mill	C18		H
Roundhouse	C19	Brick	M
Sails	C19	Wood, Iron	H

Machinery

C18

Wood, iron

H

ARCHAEOLOGICAL POTENTIAL

This mill, one of eight which stood in Braintree and Bocking, was once thought to date back to 1680 but there is now fairly conclusive evidence that it was built in 1721, making it the second oldest surviving windmill in Essex.

SITE SIGNIFICANCE

Bocking was the first windmill in the country to be taken into public ownership and hence is of historic importance. It is a very well preserved example of its type.

RECOMMENDED ACTION

Maintain existing listing, but remove Scheduled status. Listed building description needs updated.

MANAGEMENT

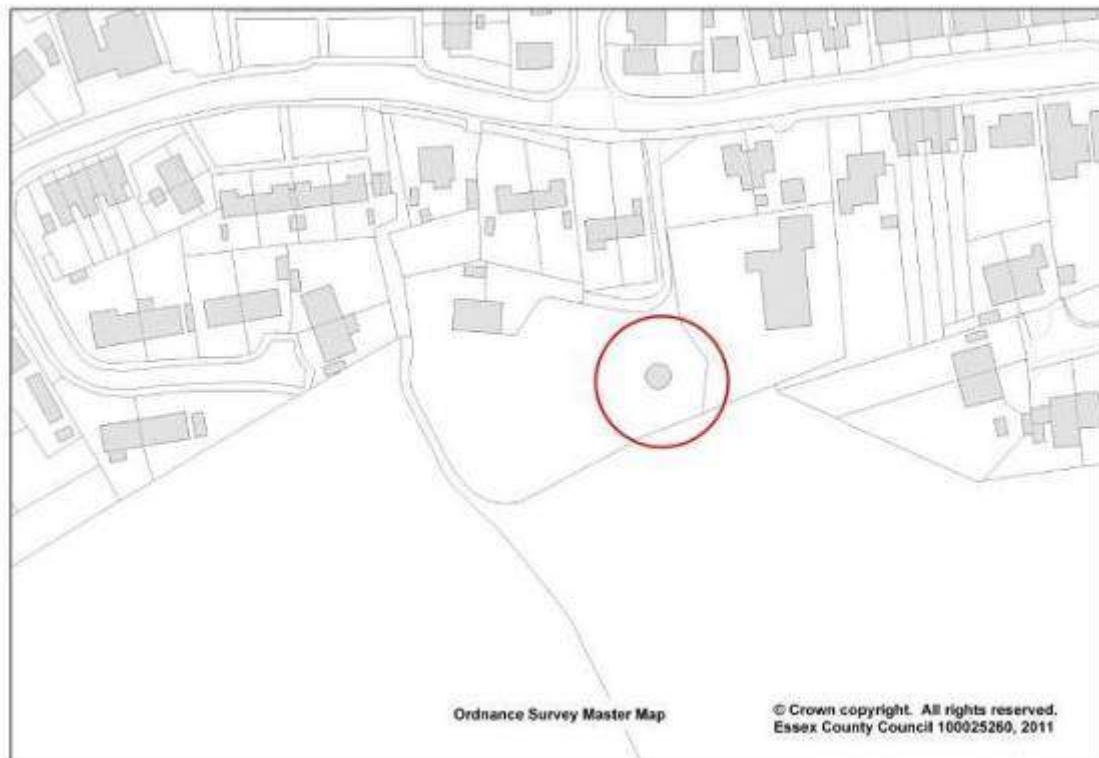
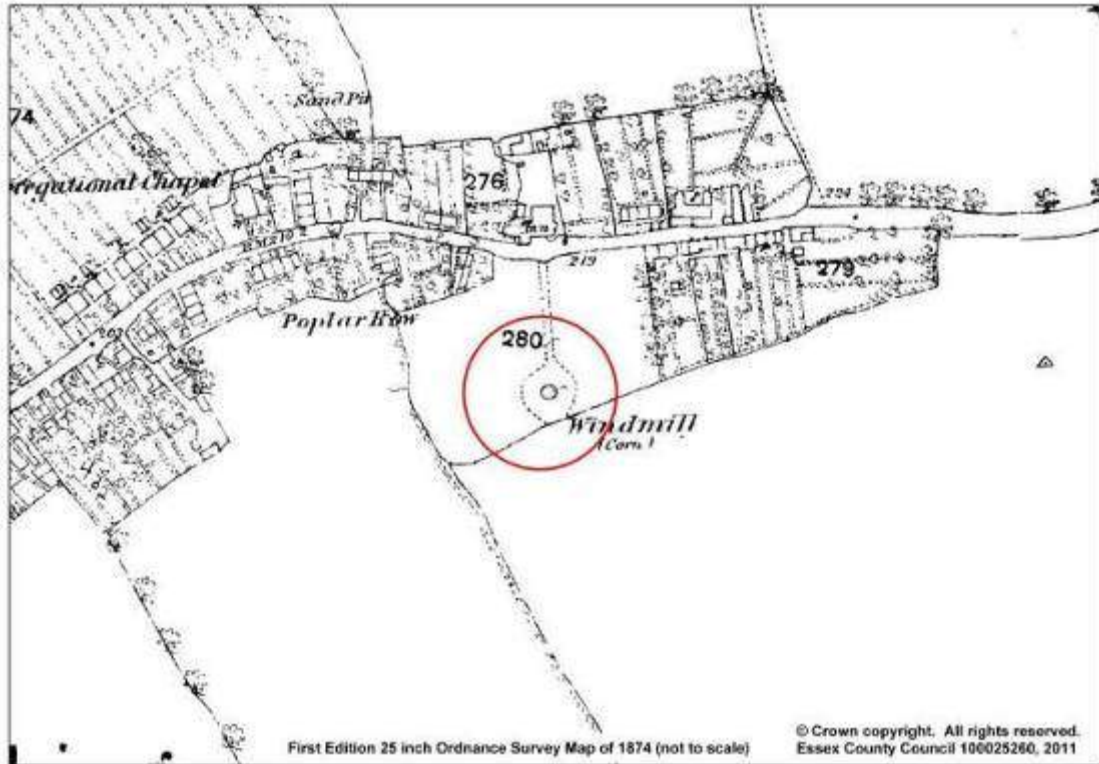
The mill is regularly maintained by Braintree District Council working in conjunction with the Bocking Mills Group, a volunteer organisation set up in the 1964 to open the mill to the public. Some repairs are necessary. Its future, along with a small number of other windmills and watermills owned and maintained by ECC, looks assured.

Prior to any significant future construction work to the windmill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mill's original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ****



Photograph of Bocking Post Mill Post Mill



SITE NAME Finchingfield Duck End Windmill

PARISH Finchingfield

DISTRICT Braintree

NGR TL 686330

EHER 29267

CURRENT STATUS Con. Area Yes

Listed Grade II

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

TL 6832 FINCHINGFIELD DUCK END
(east side)

7/38 The Windmill
2.5.53

GV II

Post mill. Early C18. Timber framed, weatherboarded, roundhouse of red brick. A small post mill, brought from elsewhere and erected on a high mill mound before 1840. The roundhouse was added in 1840. Formerly had 4 single-shuttered spring sails revolving anti-clockwise on an all-wooden windshaft (a rare feature, which survives dismantled), driving one pair of stones directly from the brakewheel, with a tail pole to turn it into the wind. Many carved dates inside the structure, of which the earliest is 1753. Belonged to the Spains Hall estate and last worked c.1890. After a period of dereliction it was repaired by the Parish, and again in 1958 by Essex County Council. At time of survey, August 1984, a major programme of restoration by Essex County Council has begun.

Listing NGR: TL6854732974

KENNETH FARRIES SURVEY

Post mill known as Duck End or Town Street Mill. Stands preserved just north of the village centre. The partially rebuilt windmill, now a valued feature of the renowned village scene, is a reminder of the primitive wooden structure mapped by Chapman and Andre in the 1770's which was perched boldly to decorate the cottages. Little remains of the active days...The numerous photographs of the mill in derelict state show in fact four single-shuttered spring sails in the all-wooden windshaft, which was replaced by Essex County Council during the post-1957 restoration by the iron shaft from Gainsford End, Toppesfield. The wooden shaft, the last surviving in Essex, is preserved in the roundhouse, together with the brake wheel, an 8 ft. 8in. double clasp-arm wheel with six cants and wooden cogs. Some original timbers remain in the body from which the stone floor and much of the spout floor have been removed.

JOHN BOOKERS SURVEY

22/04/1971

Small, white-painted weather-boarded post mill with brick roundhouse standing on an unusually high mound nearly 20 feet above the level of the road. Said by Wailes to be the smallest post mill in Essex. Oak windshaft but very little other original machinery. The interior of the mill bears the following inscriptions: 'W.A. 1760 W.1773'; a picture of a post mill and date 'W&S 1777' is cut on the crown tree. One brick of the roundhouse bears the date 1840. Other sources: the best guide to the early history of the mill is given by the above inscriptions. Documentary sources are difficult to pin down because there was more than one windmill in Finchingfield; there is a deed (ERO D/DO T926) a newly erected windmill, 1766, and this may be the one in question; M/F of Finchingfield deeds(ERO T/B 204/4), 177? Refers to windmill destroyed by fire and this possibly explains the 1773 date but this is conjecture. Another window was apparently 'new-built' in 1792...The mill was in a dilapidated condition before acquisition and renovation by Essex County Council in the 1950's.

SITE BACKGROUND:

Older, smaller and much longer disused than other Essex preserved post mills, the charmingly named Duck End mill is sited in this picturesque village visited by tourists from all over the world. It is the only survivor of the seven corn mills which once existed in the parish. It is a small feudal or estate mill set up primarily to fulfil a local need, in contrast to mills which were erected later purely as business ventures. However, small mills like this were often incorporated into entrepreneurial businesses in their latter days.

The mill is thought to date from 1756 and stands on a gravel terrace some 6 metres above the nearby road from which it is approached by a steep footpath. The trestle, or substructure, was exposed to the weather until about 1840 when a roundhouse was built. Evidence of this can be seen in the quarterbars which are still tarred to prevent water penetration and in the date of 1840 cut into the brickwork of the roundhouse near the door. The mill body has been extended rearwards to incorporate a porch at the top of the steps. The mill became disused sometime in the 1890's and the mill stones removed, destroying much of the stone floor. Sixty years later it was restored as a visual amenity, acquiring an inappropriate set of dummy sails and a damaged iron windshaft. These remained until Essex County Council began the difficult restoration to return the mill to its former glory. As well as the replacement of the absent stones, a wooden brake wheel nearly three metres in diameter had to be made and new sails designed and built. One of the most difficult tasks was the fashioning of a new wooden windshaft from an oak tree felled in Norfolk.

Field Survey 2011

28/02/2011

The mill is regularly visited and inspected by the Essex County Council mills team and maintained in good order. The sails are not fixed but the brake is kept on and webbing prevents movement should the brake wheel give way. The mill can be turned into the wind using the tail pole (winding the mill) and the mill body is fully accessible. The original wooden windshaft is within the roundhouse and is one of only three complete shafts extant today in England. Outside on the grass is the cast iron windshaft brought here from Gainsford End, Toppesfield in 1957 (see entry). Although broken off at the rear (by the unfortunate contractor who dropped it during removal) this windshaft is of interest as it is a hollow casting for operating patent sails. There are plans for restoration of the mill shaft by the ECC mills team for display at this site.

The mill does not appear to be on an unusually high mound as Booker et al suggest but is located on a terrace above the road on the same level as adjoining properties.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post windmill	C18	Wood	H
Sails	C20	Wood, iron	H
Brake Wheel	C18	Wood	M
Windshaft	C18	Wood	H
Tail Pole	C18	Wood	M
Roundhouse	C19	Brick	H
Windmill mound		Unknown	H

ARCHAEOLOGICAL POTENTIAL

Excellent preservation and rare examples of a complete wooden windshaft, mound, roundhouse, sails and machinery.

SITE SIGNIFICANCE

High as the mill contains excellent examples of original features and machinery and it very well maintained. It is possible that earlier mills have occupied this site.

RECOMMENDED ACTION

Upgrade to II* in view of its landscape importance and quality. Should the opportunity present itself an internal inspection and/or historic building survey is recommended in order to assess and record levels of archaeological/historic and technological survival within the buildings.

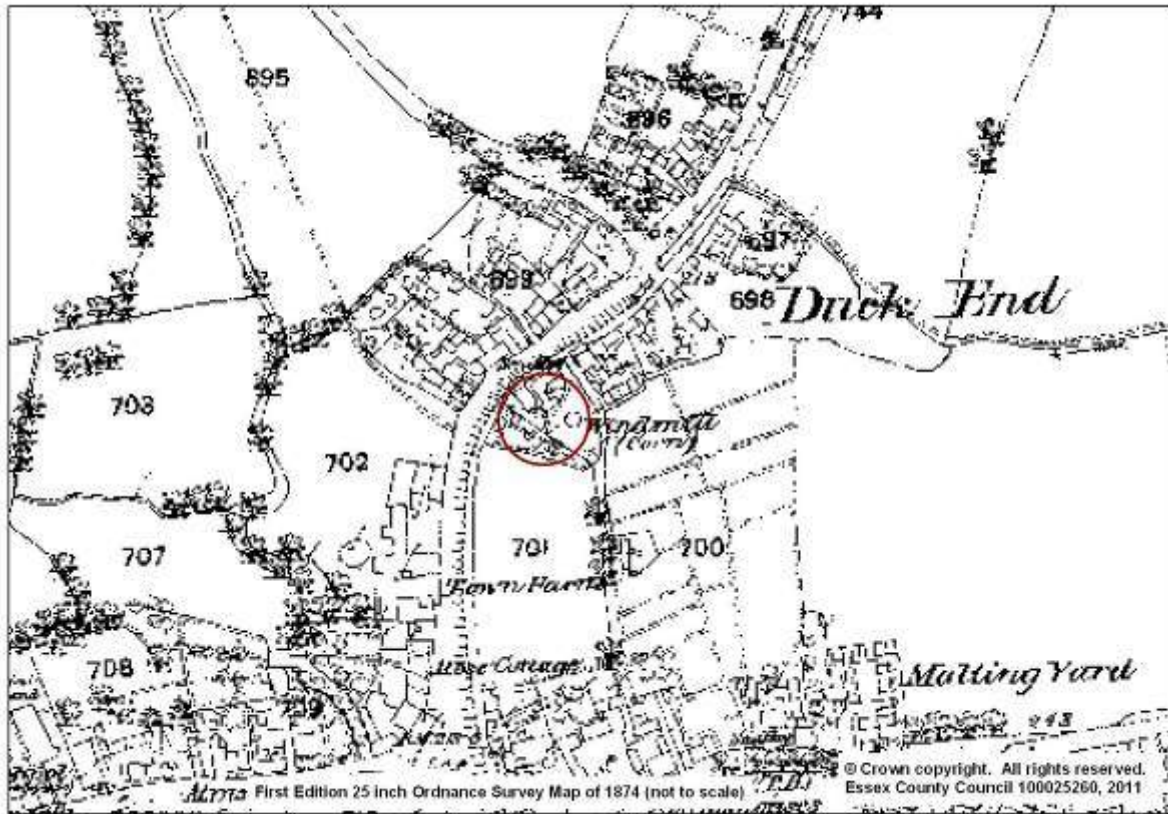
MANAGEMENT

Presently owned and maintained by Essex County Council. Prior to any significant future construction work to the mill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ****



Photograph of Finchingfield Duck End Windmill



SITE NAME Giffins End Roundhouse Remains

PARISH Braintree

DISTRICT Braintree

NGR TL756226

EHER 47476

CURRENT STATUS Con. Area No **Listed** NL **EBAR** No

STATUTORY LIST DESCRIPTION

The building is not listed.

JOHN BOOKERS SURVEY

Present Use: Some remains used as a garden feature.

Condition: Not known

ERO SOURCES:

KENNETH FARRIES SURVEY:

Post mill. Known as Giffins End Mill, Braintree. Part of the base is preserved as a garden feature on the north side of 'The Mill House' on the west side of the London Road at a point 500 yards south of the parish church...The mill house and part of the roundhouse of the post mill are still to be seen (1974)...The body was undoubtedly capacious – the equal of Aythorpe Roding mill – the largest remaining post mill in Essex. The roundhouse was tall, as the remains suggest...In May 1882, the property was auctioned, the mill itself being described as fitted for steam power, driving four sets of stones and having five floors...Owing to the lack of response, the proprietor was obliged more than a year later to demolish the mill and sell the materials...

SITE BACKGROUND:

Field Survey 2011

A fragment of the roundhouse is embedded in the modern house.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse remains	C19	Brick	L

ARCHAEOLOGICAL POTENTIAL

The site may merit further investigation if future works were to be carried on the site. Roundhouse wall footings and cross-trees may exist.

SITE SIGNIFICANCE

There has low significance due to very poor survival.

RECOMMENDED ACTION

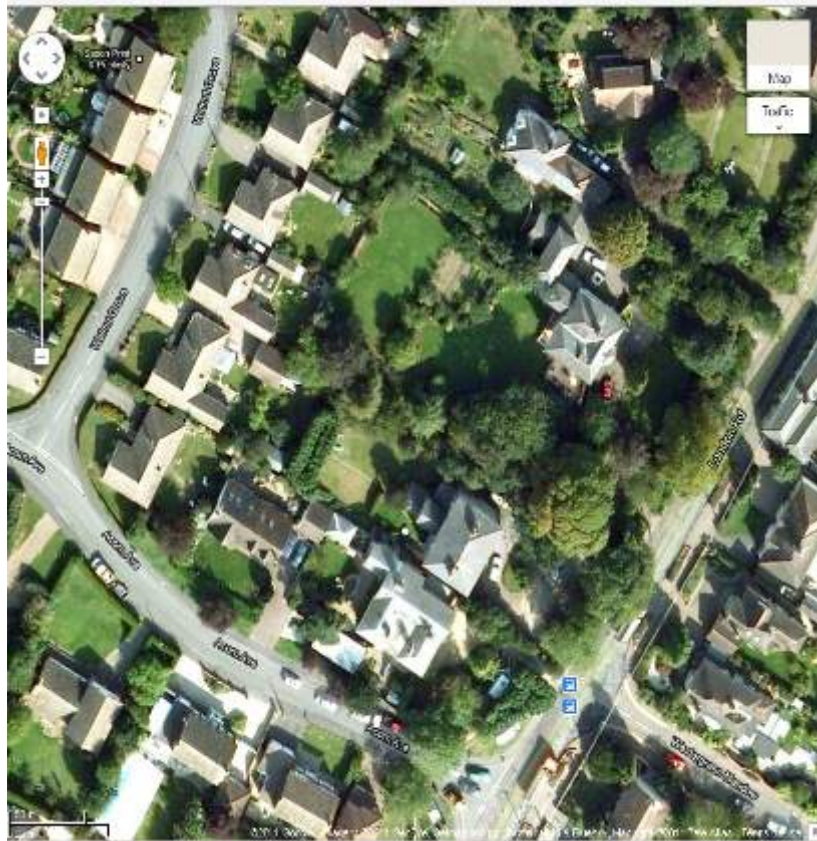
The site would not meet any criteria for listing and is unlikely to meet criteria for local listing.

MANAGEMENT

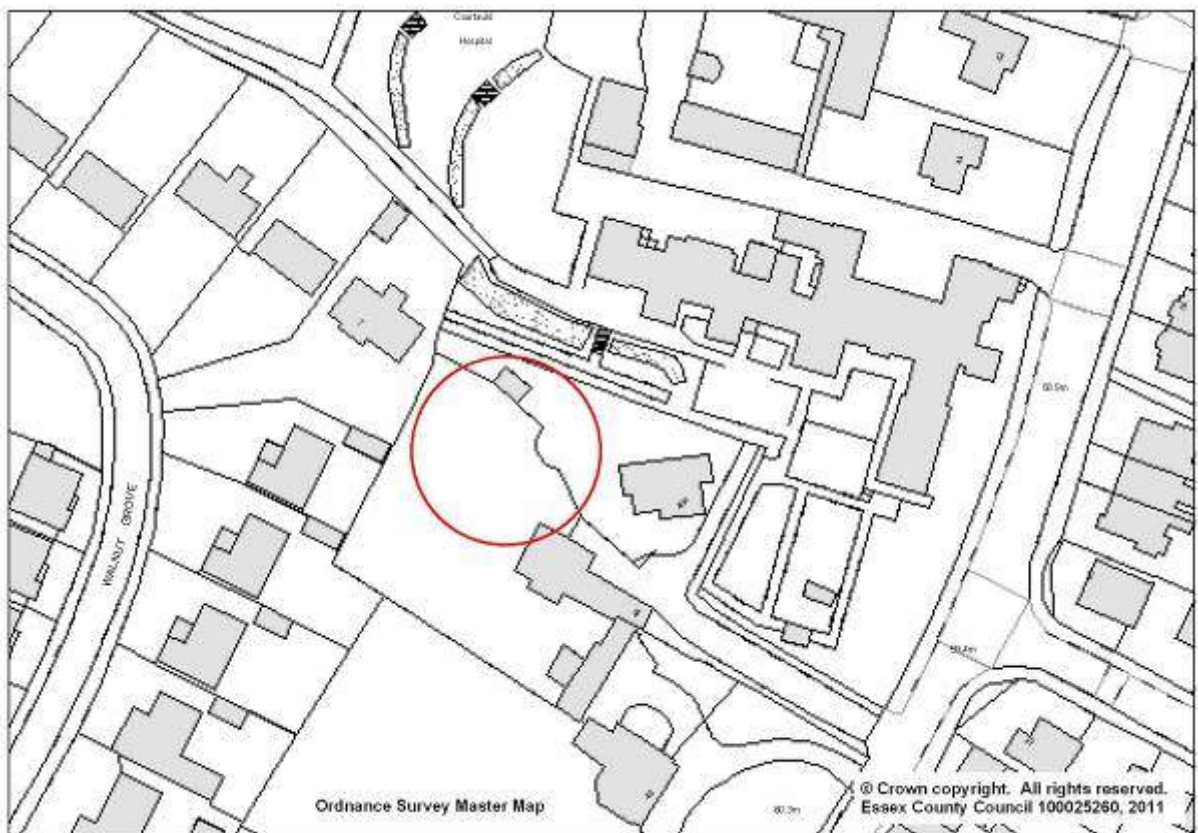
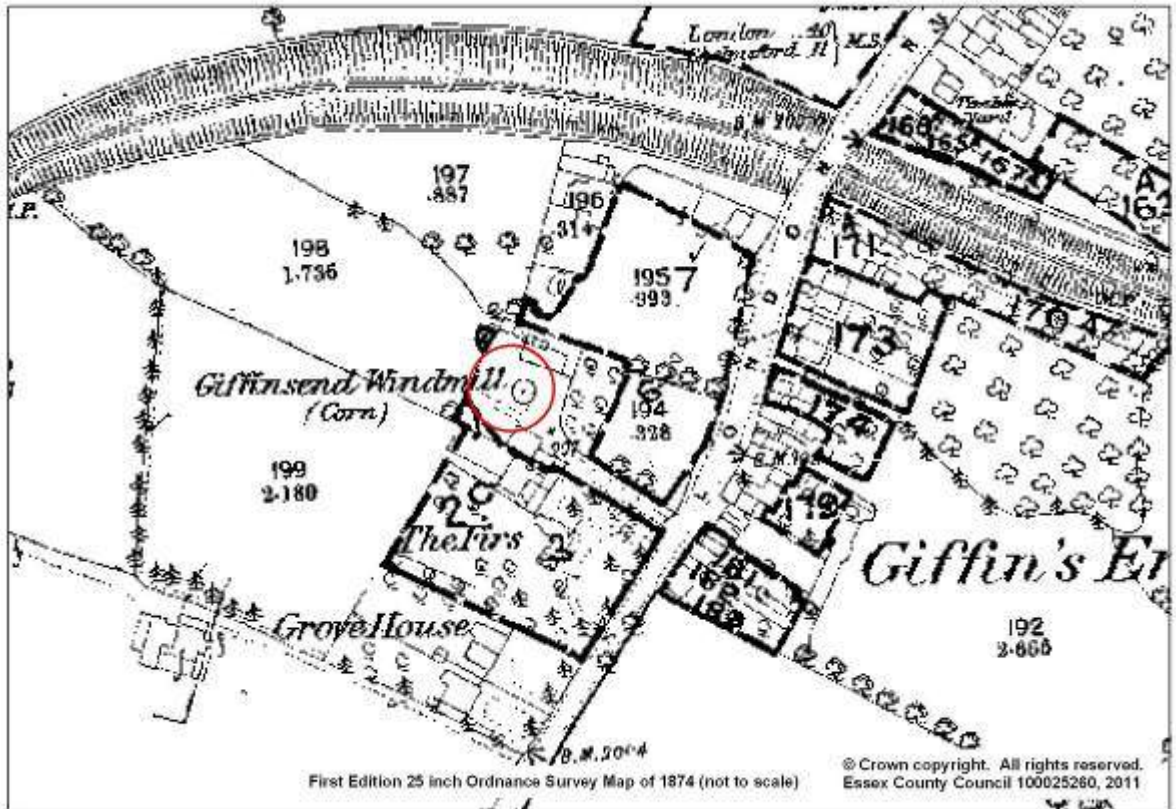
Should future development impact the foundations of the modern house it would be interesting

to see if there is evidence for an earlier windmill site.

GRADING 0



Photograph of Giffins End Roundhouse Remains, Google Maps Street view, retrieved on August 2011



Smock Mills and Bases

SITE NAME Bulmer Smock Mill Base

PARISH Bulmer

DISTRICT Braintree

NGR TL861408

EHER 47486

CURRENT STATUS Con. Area No Listed No **EBAR** No

STATUTORY LIST DESCRIPTION

This building is not listed.

KENNETH FARRIES SURVEY

Smock mill. Bulmer or Ballingdon Mill. The brick base survives on the north side of Mill House at the top of an abrupt rise off the Bulmer road just within the parish boundary.

This once conspicuous and majestic mill, with double storied base, tarred octagonal body, and white stage, sails, fan and dome-shaped cap with finial, was featured on 19th-century maps from first to last. It certainly existed in 1793 when it was owned by George Pung of Ballingdon, described as a miller. ... the existing brick base, of stout construction, has vertical walls inside measuring 21ft. between opposing sides of the octagon, and stepped brickwork outside, as seen at Frost's Mill, Halstead but here on a more ambitious scale: no fewer than a dozen steps in 70 courses, with an overall thickness at ground level of 3'6". Within the base the main beams up to stone-floor level are still in position, and one may see how the hurst carrying the great weight of the stones was supported by a set of 11in. square pine posts, standing on the ground floor and making a 'box' of about 8 ft. by 11 ft., their tops emerging about 2 ft over stone-floor level, now close to the roof of the truncated structure. The main floor beams, also of pine, are housed in and bolted to these posts. ...milling by wind ended in 1911, when a Turner, Ipswich engine was installed, still in use in 1936. The mill body, without sails, stood from 1911 to February 10th 1928, when lightning again struck, destroying the cap and setting fire to one of the cant posts, so that the resulting damage made demolition imperative; this took place in August of the same year.

JOHN BOOKERS SURVEY

Not included

Present Use: Part of house premises; light domestic storage

Condition: Condition of the smock mill base is good and it is well preserved.

ERO SOURCES:

No references

SITE BACKGROUND:

Located on an important milling site adjacent to the Stour valley and the town of Sudbury. Listed as significant mill remains in Wood 2005. On private property and cannot be seen from public roads or footpaths.

Field Survey 2011

27/04/2011

An impressive and architecturally interesting structure. As Farries description. Elaborately constructed smock mill base in good preservation and standing on private property. Doubled storied stepped brick base. Original hurst frame remains intact within the ground floor and supports the stone floor through two original main floor joists. Internal spiral staircase to

Stone floor. The doorstep consists of a 44in. O.D. French Burr millstone. Octagonal low pyramid roof.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill base	C19	Wood, brick	M

ARCHAEOLOGICAL POTENTIAL

It seems unlikely that significant levels of technology, internal fixtures or fittings will survive within the present structure. However the building merits further investigation.

SITE SIGNIFICANCE

Impressive smock mill base which is maintained in good condition by current owner, however it does not seem likely that any fixtures or machinery survive and as such the significance is low.

RECOMMENDED ACTION

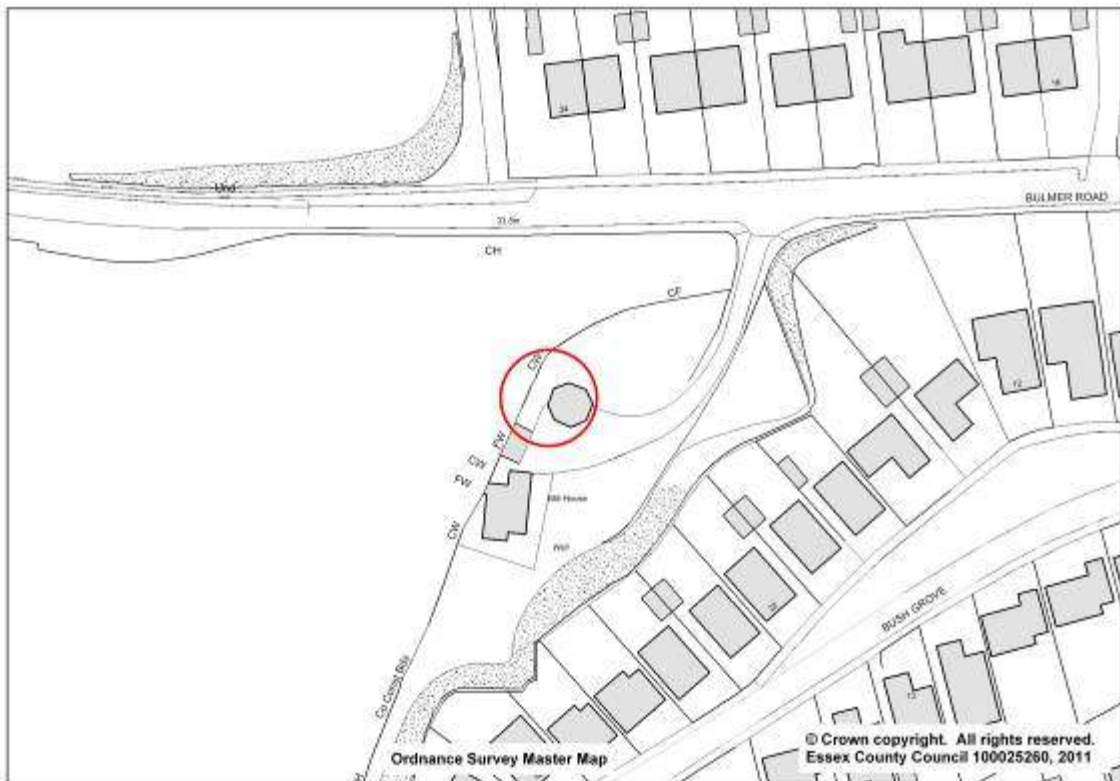
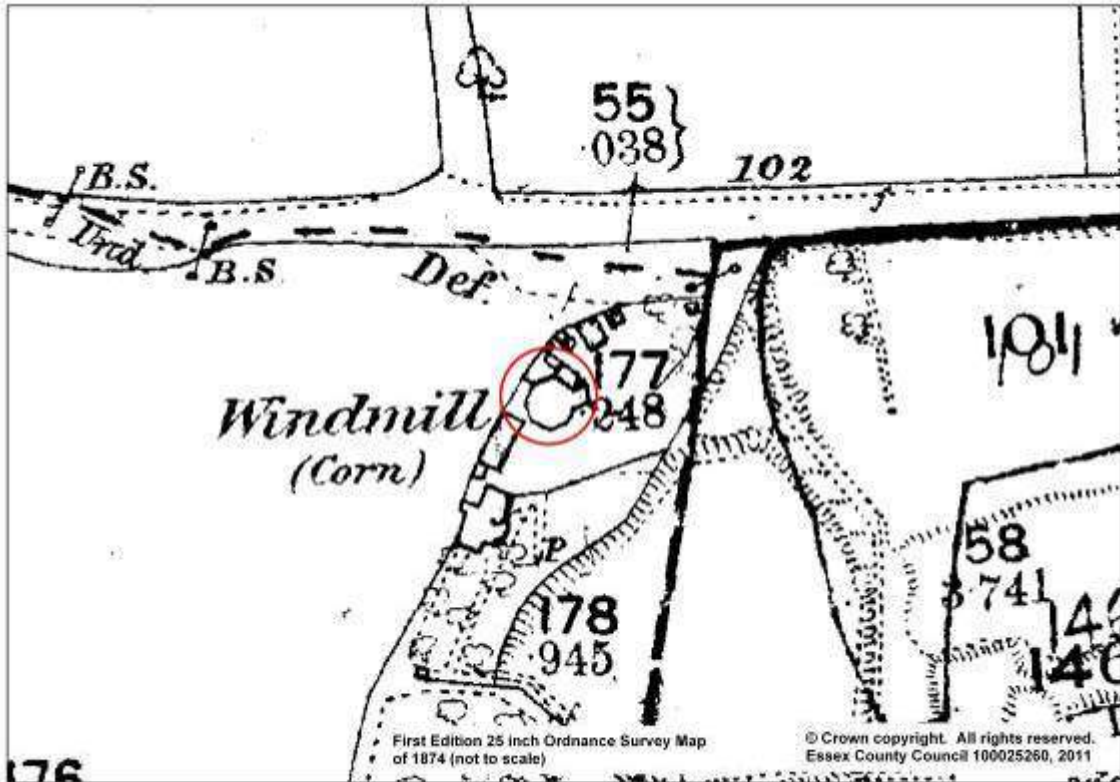
Recommend for listing at Grade II, in view of the good state of preservation and notable architecture.

MANAGEMENT The windmill is in private ownership and mainly in residential use. Should the opportunity present itself an internal inspection and/or historic building survey is recommended should the roundhouse become threatened by significant alteration or demolition.

GRADING *



Photograph of Bulmer Smock Mill Base (Google Maps Street view, retrieved on August 2011)



SITE NAME Frost's Mill Halstead

PARISH Halstead

DISTRICT Braintree

NGR TL 815310

EHER 26195

CURRENT STATUS **Con. Area** Yes **Listed** Grade II **EBAR** No

STATUTORY LIST DESCRIPTION

16-Mar-1978

1. 5210 MILL CHASE Mill and Mill Building, North Mills TL 8130 NE 2/122

II

GV

2. Brick base to original smock mill built 1790. Octagonal, flemish bond, good Georgian window and original door. Joists to original stone floor remain. C19 mill buildings 2 and 3 storey, gault brick windows. White weatherboarded Lucam. Brick factory chimney.

Listing NGR: TL8151030988

KENNETH FARRIES SURVEY

The Frosts...pass on the family tradition that the smock mill was built c.1790 and re-towered in 1820. ...In 1827 the executors of the late Joseph Greenwood were auctioning the 'capital old established tower windmill' containing four floors and three pairs of stones., 'the whole having been rebuilt within the last seven years and very recently fitted up, at considerable expense, with new sails and cast iron shaft'...In November 1867, the mill was tail-winded, when caps and sails were thrown down into the mill yard. ...The cap was rebuilt by Whitmore and Binyon of Wickham Market...In 1907 the Frosts abandoned the use of wind power. In 1922 the sails and cap were removed and an iron roof laid over. The smock framing deteriorated during the second world war and was regretfully taken down by the Frosts in 1947....The windmill was about 45ft. high to the finial set on the domed cap, had an eight-bladed fantail, and stood on a single-storied brick base measuring 11ft. from ground to sill level and 17ft. 6in. across the octagonal flat faces internally. The curb had an inside diameter estimated at 14ft. The brickwork of the base is stepped at five courses outside, recalling the smock bases at Bulmer and Southminster (South Ockendon).

Above ground level there were three floors: Stone at 12ft., forming the first floor, bin at 10ft. higher, and dust at 9ft. above that, leaving 6ft. to the curb. There were three pairs of underdriven stones, two French burr and one peak, operated by two pairs of anti-clockwise double-shuttered patent sails transmitting power through an iron mortise brake wheel, an iron wallower, a two-part upright shaft, iron above and wood below, an iron mortise great spur wheel made in two parts by Whitmore and Binyon, and all-iron stone nuts bearing on iron bridge-trees. The iron wind and other shafts and wheels were sold as scrap metal after removal, but some of the timbers were retained, including the eight curb segments.

JOHN BOOKERS SURVEY

10/06/1970

Base of former smock mill, known as Frost's Mill, at west end of Mill Chase. Smith Bros. & Frost, Halstead and Braintree. Octagonal yellow-brick base of former smock mill in forecourt of mid-Victorian mill, formerly steam powered, which is still worked as a mill. Late Victorian millers' or workers' houses on N. side. The smock mill itself was working until 1906 or 1907 and the base is reputed to have been built around 1750. The cap, sails and fly-tackle were brought down in a gale in 1867 but were replaced, and the sails were in position until 1922. That left only the tower part and base, thereafter, and the wooden tower was demolished in 1947.

Present Use: Used as a store

Condition: Excellent

ERO SOURCES:

SITE BACKGROUND:

This site was thoroughly investigated and described under the Industrial Survey No. Watermills and Steam Mills of Essex. The section here will deal solely with the smock mill base.

Field Survey 2011

28/04/2011

Structure is in good condition and of considerable architectural interest. Good original fenestration. Houses a variety of objects of historic interest as detailed in the description by Farries above. The smock mill base is still owned and used for storage by the Frost family but the adjoining mill buildings are now separately owned and used for sheltered accommodation managed by Cognitum (formerly English Courtyards Ltd). A single dressed 54in. O.D. French Burr stone is leaning against the outside of the smock base as a garden ornament but the Calcium sulphate (Plaster of Paris) matrix is deteriorating rapidly. The stone was constructed by W.A.Dell & Son, Mark Lane, London and could have been used in smock mill or in the adjoining steam mill.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill base	C19	Wood, Brick	M

ARCHAEOLOGICAL POTENTIAL

Good survival of original internal spaces, technology, fixtures and fittings.

SITE SIGNIFICANCE

This is an important industrial site and much of the original machinery and fittings remain within the adjoining steam mill. It shares some group value with the adjoining listed steam mill and mill house and retains considerable local interest. Through group value with the steam mill and mill house the smock mill base survives as a significant addition to the historic character of Halstead and as such its current listed status should be maintained.

RECOMMENDED ACTION Maintain current listing.

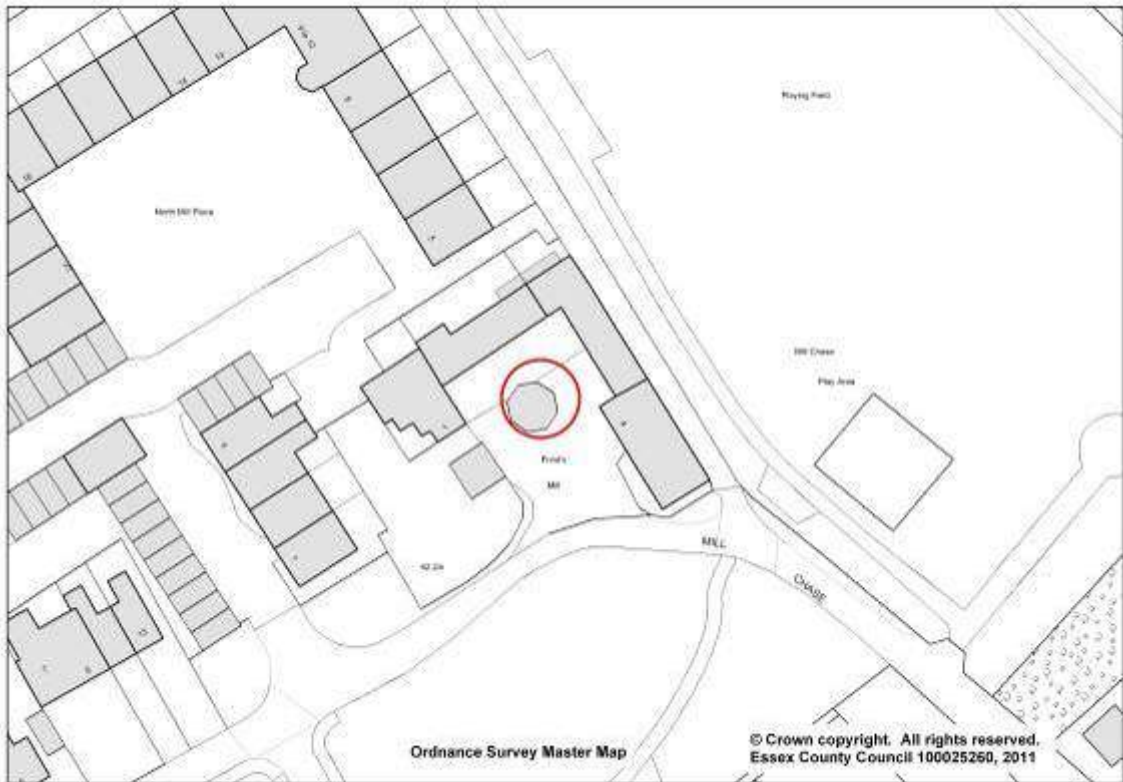
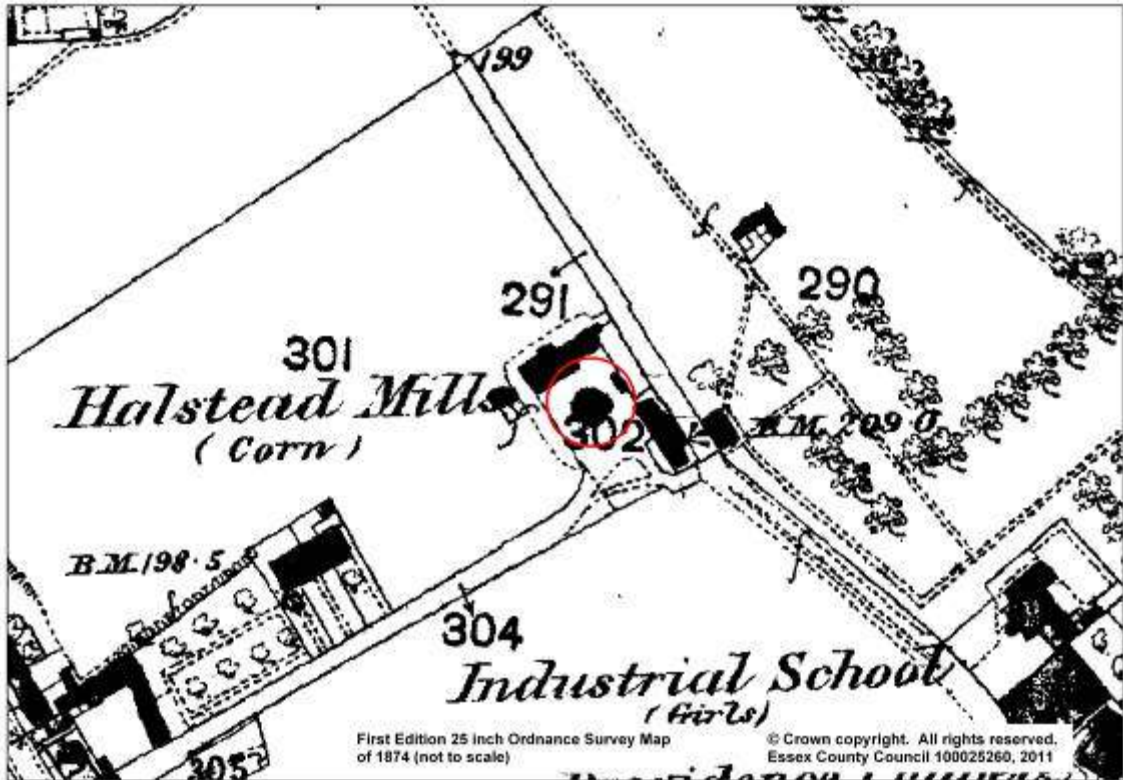
MANAGEMENT

Contact should be established with the Frost family (currently Gretton Frost, living in Greenstead Green, Halstead) to ensure that the building and its internal timber framework and contents are safeguarded for the future.

GRADING ***



Photograph of Frost's Mill Halstead (Google Maps Street view, retrieved on August 2011)



SITE NAME Pettit's or Day's Mill, Great Sampford

PARISH Great Sampford **DISTRICT** Braintree

NGR TL 643356 **EHER** 1567

CURRENT STATUS **Con. Area** Yes **Listed** NL **EBAR** No

STATUTORY LIST DESCRIPTION

The following building was de-listed 21 March 2005:
GREAT SAMPFORD

952/40/335 HIGH STREET 22-FEB-80 (East side) OLD CORN MILL

(Formerly listed as: HIGH STREET THE OLD MILL)

DL

KENNETH FARRIES SURVEY

Smock mill. The base has been converted into a cottage in Great Sampford village on the east side of the Radwinter road 140 yards north of the church. ...John Pettit was recorded and the owner-occupier of the mill in 1842...the only hint as to the working capacity of the village mill comes from a notice to let in October, 1878, when Miss Pettit of Clock House Farm advertised a tower mill driving two pairs of stones. The surviving mill base measures 19ft. across the flats of the octagon internally at ground level, tapering to 16ft. at the top of the walls. Which are 2ft. thick and contained two floors. It was last of the 4 Sampford Mills to work, passing...to John Day (1906), who in 1912 was stated by Kelly to be using wind power. Dr Turner noted in 1921 that the mill had been taken down more than seven years previously, and other informants state that this was done by Scott of Radwinter, Millwright. The mill was in fact recorded on the third O.S. 6in. map (1919) as 'Corn Mill', but evidently in reference to the use of power-driven stones in the base....In 1985 the discovery of an old photograph revealed that the village smock mill was ...most likely the product of a Cambridgeshire millwright.

JOHN BOOKERS SURVEY

10/06/1970

One of the relatively rare instances of the base of a smock windmill having been converted to a dwelling. The bricks have been painted black and the dwelling now has a thatched roof. The mill itself has been down for very many years and not even what remains was recorded by Smith in 1932.

Present Use: Converted to dwelling

Condition: Good

ERO SOURCES:

SITE BACKGROUND:

The construction dates and the destruction dates for this windmill are not certain. The octagonal base design resembles Great Holland Mill and Mashbury.

Field Survey 2011

28/02/2011

The remaining base gives little idea of the interesting smock mill that once stood at this spot.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill base	C19	Brick, tile	L

ARCHAEOLOGICAL POTENTIAL

Given that the buildings has been largely demolished and converted for residential use, it is unlikely that any internal fitting remain.

SITE SIGNIFICANCE

Given that the smock mill base has been converted to residential accommodation, it is thought that very little internal fixtures or fitting survive. The significance is therefore thought to be minimum.

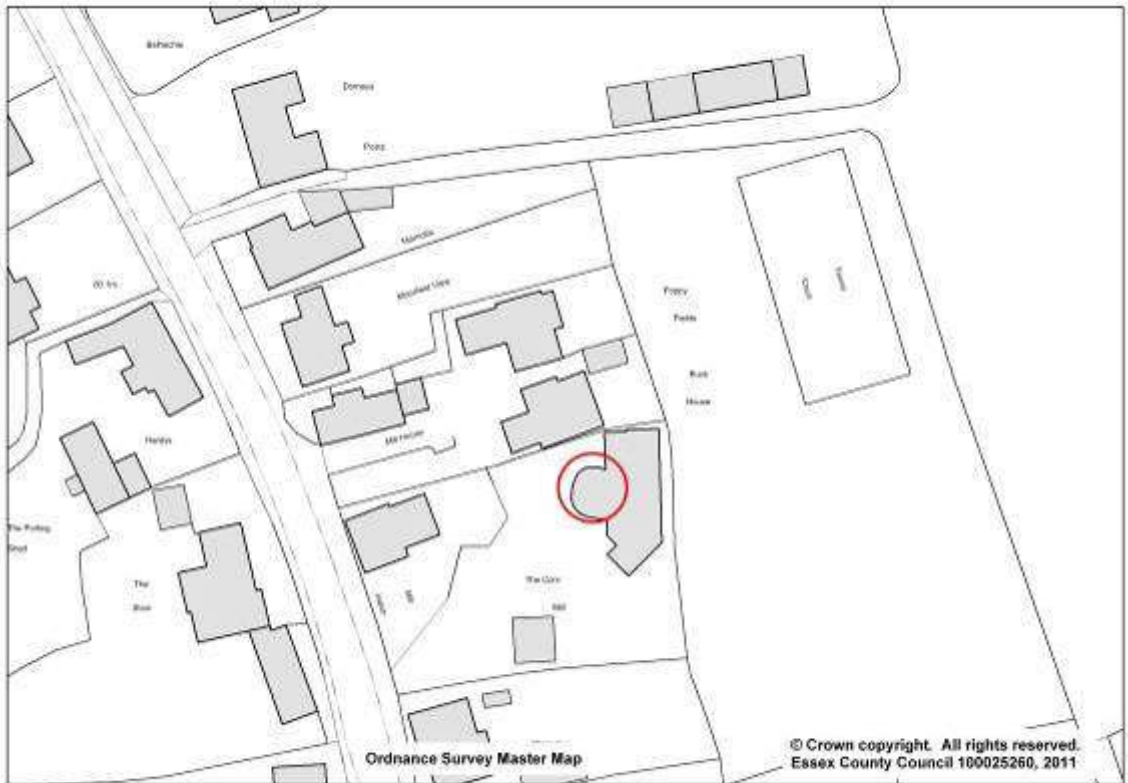
RECOMMENDED ACTION None.

MANAGEMENT The site is offered some protection through its location in a Conservation Area, and if it was to become threatened, it is advised that the building should be recorded to ascertain whether any internal fixtures survive.

GRADING *



Photograph of Pettit's or Day's Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Terling Smock Mill

PARISH Terling

DISTRICT Braintree

NGR TL 76484 01500

EHER 29888

CURRENT STATUS **Con. Area** Yes **Listed** Grade II **EBAR** No

STATUTORY
13/03/1986

LIST

DESCRIPTION

TL 7614 and TL 7615 TERLING MILL LANE
8/134 and 10/134 The Windmill
II

Smock mill, now a dwelling, and attached house. Early C19, altered in C20. Mill, timber framed, plastered and weatherboarded, with fabric-covered cap. House, timber framed, weatherboarded, roofed with slate. Mill octagonal, with house extending to NW, and C20 wing to NE, forming an L-plan. Mill of 5 storeys and cap, house of 2 storeys. The ground floor of the mill is plastered, with one C20 casement on each of 6 sides and a C20 door to the SE. The remainder is weatherboarded, with 4 C20 casements on each floor, and 2 loading doors on the first floor. Stocks, sails and fantail gear. Ball finial on cap. SW elevation of house, 3-window range of C20 casements. C20 door. Low-pitched roof. The mill is reported to have been built in Cressing c.1770, and removed to Terling c.1825 (A. Hills, Four Essex Windmills, Essex Review, XXXIV, 1930, 84) but no confirmation of this has been traced. Internally, there are structural indications of various alterations and dismantling and re-erection is a possibility. The mill was present in Terling in c.1818, initially designed for grinding bark, and altered to corn milling soon afterwards. It worked until 1960, and was the last working windmill in Essex. The machinery has been removed, but was fully recorded. (K. Farries, Essex Windmills, Millers and Millwrights, I, 1981, 62, 69-70, II, 1982, 65-8, and V forthcoming).

Listing NGR: TL7643115010

KENNETH FARRIES SURVEY

Smock mill. Stands today, preserved as a landmark and private residence, half a mile west of the village centre. There is a persistent tradition that it was erected in Cressing in about 1770 and removed to Terling some 60 years later...both dates appear to stem from the writings of Alfred Hills who spoke with Bonner the last miller. What seems probable is that the mill was built or re-erected c1818 and was initially designed for grinding bark... In 1818 Wood the owner offered the new windmill for sale and it was converted to corn-grinding and worked until 1949 on four patent sails which with a white domed cap over a latterly tarred body were highly photogenic. The sails turned three pairs of millstones and an oat crusher at the same time, the stones being underdriven. ...Before its conversion into a residence, Terling mill was exhaustively surveyed from a technical standpoint in 1968-9....The framing of the smock was carefully examined in 1968 in view of the alleged removal from Cressing in the early 19th century, but the results were not conclusive, though they suggested the transport and re-erection of the mill in parts.

JOHN BOOKERS SURVEY

10/02/1972

Former Smock windmill

A rather difficult site. There is a strong tradition (repeated at least three times in the sources including Burton) that this mill was moved from Cressing to this site in about 1830. Alfred Hills, quite an expert on Essex windmills, put the date of the mill as 1770, and this was repeated by Smith and copied by Wailes. Be this as it may, there was no mill on this site in 1844 when the parish tithe map was drawn up. This was the last windmill to work in Essex,

producing flour certainly until 1950 and even until 1958, but Wailes noted it as derelict in 1955. The mill is particularly famous as the setting for Will Hay's comedy 'Oh, Mr Porter'.

Present Use: Converted to private house

Condition: Good

ERO SOURCES:

OTHER SOURCES:

Personal Communication, Vincent Pargeter 2011

Hills, A., Four Essex Windmills, Essex Review, XXXIV, 1930, 84

SITE BACKGROUND:

See Historical Note above.

Field Survey 2011

29/5/2011

The building is structurally in good condition externally, although some loss of weatherboarding was noted from the upper elevations nearest to the cap. The owner was not available at the time of the visit and an internal inspection was not carried out. The smock mill tower is built into the adjoining dwelling. The sails are missing from the building and have been the subject of an enquiry by the local Terling Parish Council anxious to see them restored. Vincent Pargeter (personal communication) recently advised that the sails had been removed from the mill c.1991 and were found to consist of the original stocks (which were rotten) and dummy sails. Both stocks and sails were discarded as being unfit for replacement.

Present Use: Residential

Condition: Restored but as part of dwelling

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill	C19	Wood weatherboarding, Brick base	H
House	C19	Wood weatherboarding	

ARCHAEOLOGICAL POTENTIAL

Given that Terling Smock Mill has been converted to residential use and has lost its sails, it is unlikely that any internal fixtures and fittings survive.

SITE SIGNIFICANCE

As one of the few surviving smock mills in Essex, the site has significant architectural and historic group value and is one of the more picturesque windmills in the county.

RECOMMENDED ACTION

A full internal building survey should be undertaken to see what machinery remains, if any.

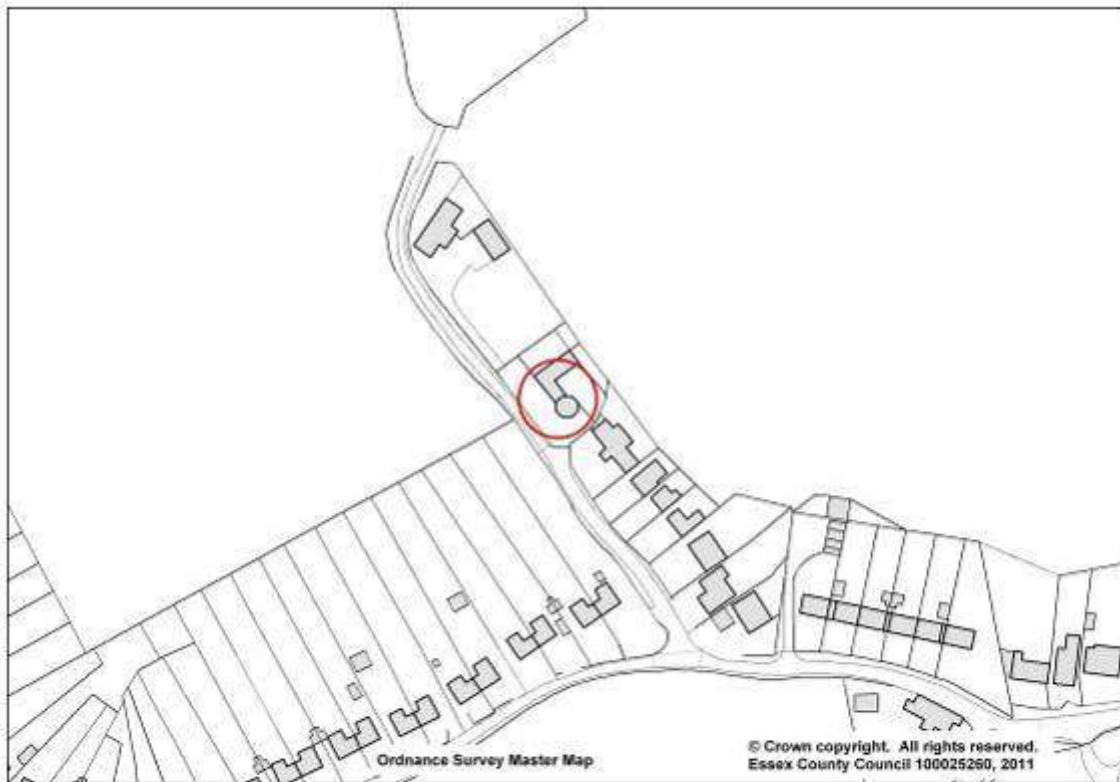
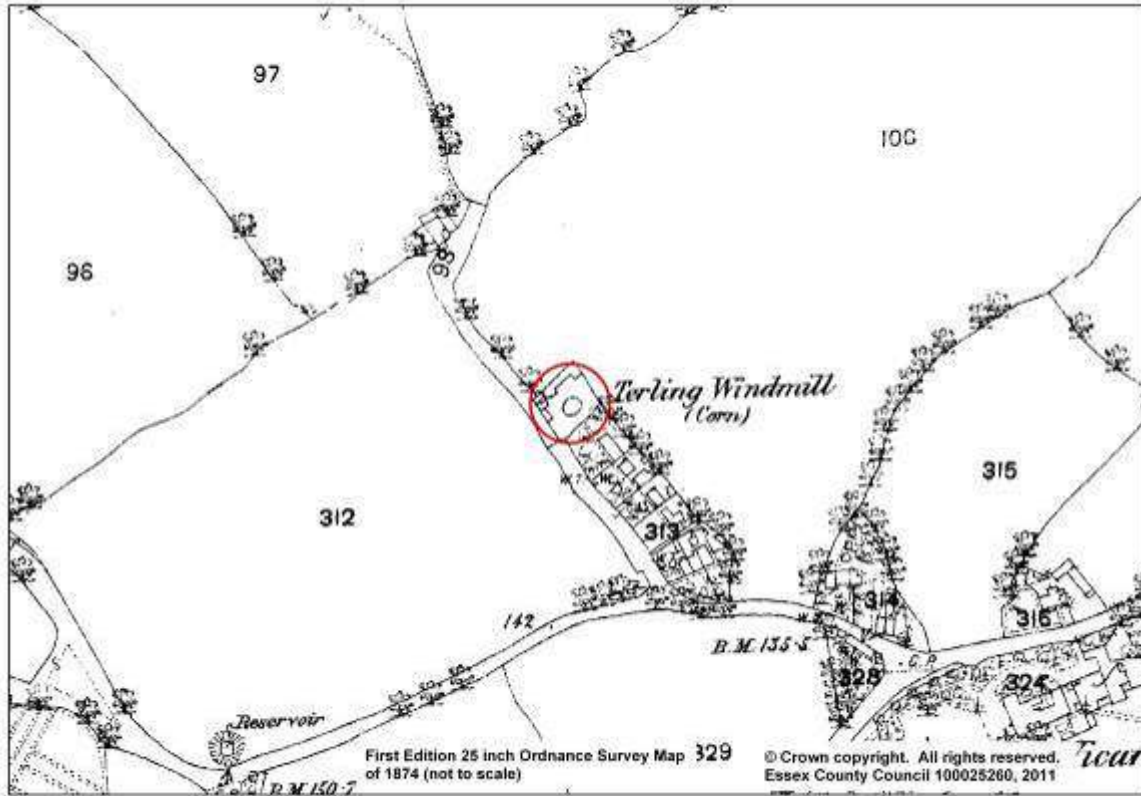
MANAGEMENT

In use as a private residence and as such are well maintained. Should the opportunity present itself an internal inspection is recommended and/or an historic building survey at RCHME level 3 should be recommended if the mill becomes threatened by significant alteration or demolition.

GRADING ***



Photograph of Terling Smock Mill (Google Maps Street view, retrieved on August 2011)



Tower Mills

SITE NAME Gibraltar Tower Mill

PARISH Great Bardfield

DISTRICT Braintree

NGR TL 68001 30722

EHER 29420

CURRENT STATUS Con. Area No

Listed Grade II

EBAR

STATUTORY LIST DESCRIPTION

21/12/1967

TL 63 NE GREAT BARDFIELD MILL ROAD
(north side)

3/195 Gibraltar Mill (Formerly listed under Outlying Items)- II

Tower windmill, now a dwelling. Early C18, converted 1934. Plastered red brick, boarded cap. Built in 2 stages, originally octagonal to a height of 6.10 metres, later raised to 9.77 metres, reducing to a circular plan. Wall thickness 1.20 metres at the base. Single-storey domestic extension to NE, of plastered brick with shingled roof. 4 floors with C20 casements on each. Boat-shaped cap, stocks and skeleton sails, fantail gear without fantail. Height overall 13.44 metres. Farries finds the earliest documentary evidence of it in 1707, and concludes that it was built after the great storm of 1703, which destroyed many mills, as an experimental tower mill with exceptionally massive walls, completed soon after the sieges of Gibraltar, 1704-5. It was not successful commercially, and was converted to a cottage, with an inserted stack in the wall. It was converted back to a mill in 1754 and raised to its present height. It was derelict 1899-1904 after storm damage and was then equipped with the present fantail gear. It had one pair of stones. Some of the equipment remains in situ. (K.G. Farries, Essex Windmills, Millers and Millwrights, vol 3, 1984, 24-7)

Listing NGR: TL6800430727

KENNETH FARRIES SURVEY

Tower mill, widely and traditionally known as Gibraltar Mill. Preserved as a residence and landmark. Stands 500 yards north east of the village centre on the north side of the lane leading to Waltham's Cross and Shalford....Alfred Hills in the Essex Review in 1930...stated that the owner, T.S.Smith J.P. had deeds showing that in 1749 the building was known as Gibraltar and used as a cottage but it had been converted into a windmill in 1751....he suggests that the lower portion was the base of a smock mill built about 1680....but Hill's authority for c1680 as the date of building is not stated...Ogilby & Morgan (1678) do not mark a mill here, and the pronounced mound may have been raised for the existing mill....A conveyance of the manor of Bardfield in 1707 ...lists: 'also the watermill and the brick windmill...situate and being in Great Bardfield'. ...Most of the machinery has been removed ...The mill was for sale as a 'unique home for the connoisseur' in 1967. ..The tower tapers from 20ft. to 13 ft. internally through a height of about 32 ft. over which the cap rises a further 12 ft. The wall taper from 4ft thick at the base to 3ft at first-floor level, and above the rough octagonal section partake of a sixteen-sided form, merging to circular at the curb. ...The present brake wheel and great spur now preserved in situ...Wailes gives 1904 as the year when the 8-bladed fantail was fitted.

JOHN BOOKERS SURVEY

Tower Windmill called Gibraltar Mill

07/03/1972

One of the most interesting mills in the county by virtue of the fabric. Over the lower 18ft, or to half way up the second floor level, the brickwork is relatively old and the tower is octagonal with chamfered edges. Higher up, the tower becomes round and the bricks are later. The cap is boat-shaped and the fantail was added in 1904. The mill was first examined critically in the early 1930's and the fact that it stood on a post mill type of mound, and had a blocked up arch on the ground floor, as well as a fireplace and two blocked up windows on the second floor, caused much speculation. Almost all sources follow Hills (ERO T/Z 20/16) who seems to have had information from the owner's deeds, which suggested that the building had been a cottage in 1749 and was converted to a windmill in 1751. Hills proposed that the lower portion was the base of a smock mill built about 1680 (no reason was given for this date which has been recited ever since), later 'debased into a dwelling'. Donald Smith, quoted by Hills, suggested that the brick octagon was a base for a post mill. Certainly hybrid mills were built – one existed at Little Laver in Essex – but Smith does not develop this in his own book (see below). In any event this was unlikely to have been a tower mill originally.

Present Use: Residential in private ownership

Condition: Good

ERO SOURCES: ERO TZ 20/37

OTHER SOURCES: A. Hills 1930, Essex Review, Vol. 39 pp. 86,89

D. Smith 1932 English Windmills, Vol. 2. pp. 74,75

R. Wailes 1958 Essex Windmills, Trans. Newcomen Soc. Vol XXXI pp 162,164,166,167

SITE BACKGROUND:

The mill is located on a very pronounced mill mound some 3 metres in height which is probably medieval. The windmill is linked by a lane to the site of the former Great Bardfield watermill and suggests that both mill sites could be elements in the management of a single feudal manor.

The windmill has affinities with Dutch smock mills of the C16 to C17 and may therefore be the only one of this type in the County.

Field Survey 2011

28/01/2011

The tower mill is located centrally on the windmill mound and forms part of a house conversion. Architecturally interesting, the base being of brick with pronounced buttresses from ground level. Reasonable condition externally with repainting and minor repairs necessary to fenestration. Sails replaced recently by the present owner (ECC Cllr Simon Walsh) who is researching the site. Not inspected internally, but understood that no machinery exists below the windshaft and brake wheel.

Present Use: Residential

Condition:

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C18	Brick/Lime render, Timber	H
House	C19	Brick	M
Windmill mound	C14-17	Unknown	H

ARCHAEOLOGICAL POTENTIAL

Although internal machinery is thought to have been removed, the windmill retains its fully body and external features.

SITE SIGNIFICANCE

The windmill is highly picturesque. Its location on a mill mound and group value with other industrial sites in the landscape means its significance is high.

RECOMMENDED ACTION

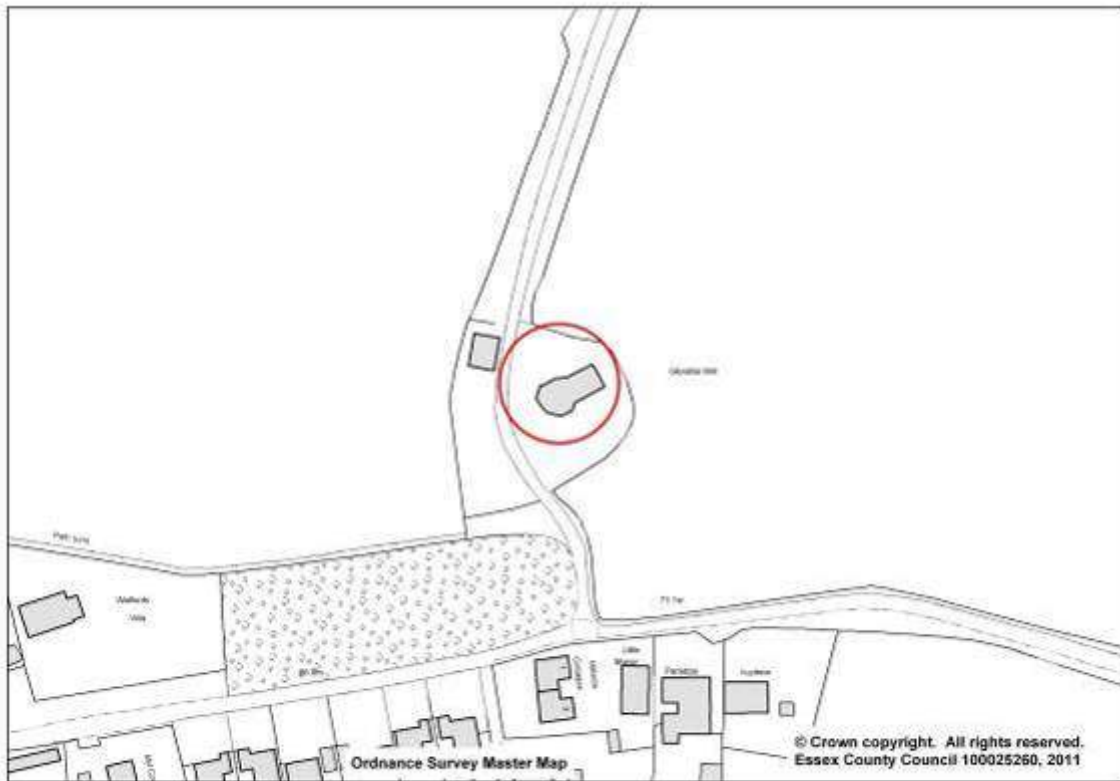
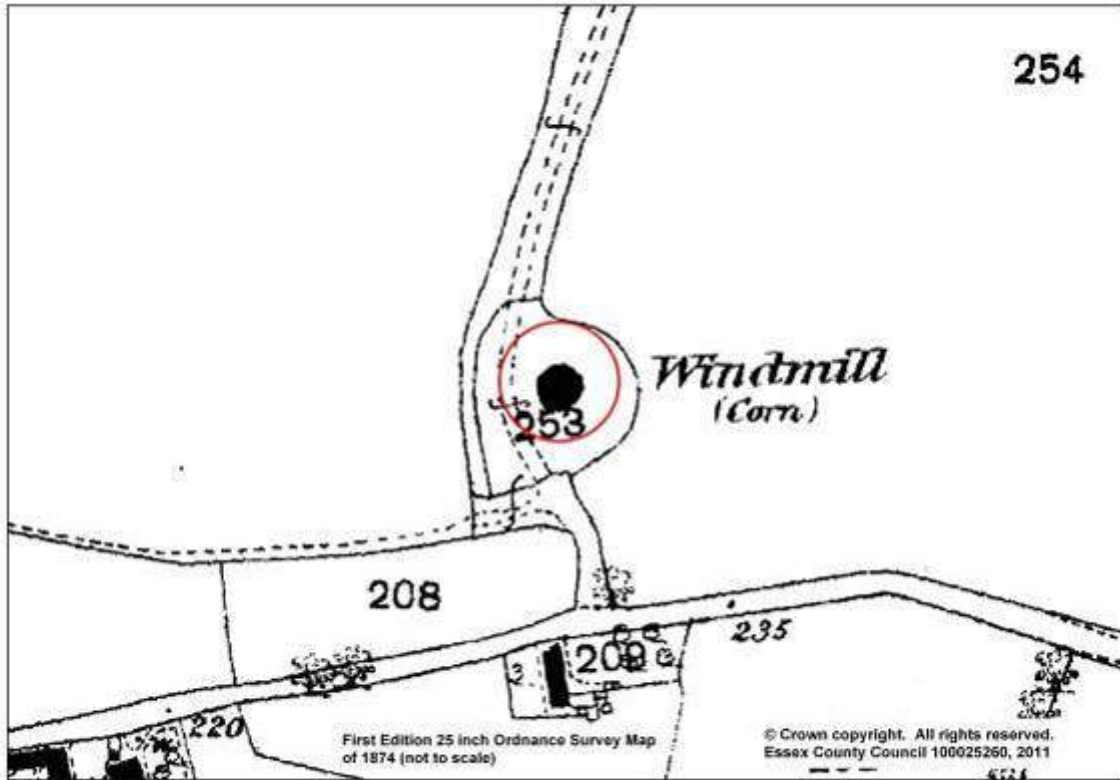
Possibly the most enigmatic and oldest windmill in Essex. We would recommend re-listing to Grade II*.

MANAGEMENT The tower mill is in very good repair. A detailed historic building survey at RCHME level 3 should be recommended if the mill is threatened by major works or demolition.

GRADING ***



Photograph of Gibraltar Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Toppesfield (Gainsford End) Tower Mill

PARISH Toppesfield **DISTRICT** Braintree

NGR TL 7262 3503 **EHER** 28430

CURRENT STATUS **Con. Area No** **Listed Grade II** **EBAR No**

STATUTORY LIST DESCRIPTION

21/12/1967

The following item shall be added:- TL 73 NW

TOPPESFIELD

GAINSFORD END WINDMILL 3/35

GV

II

Corn windmill. 1869 date on tablet. Red brick tower. Circular plan. 5 storeys. Segmental brick arches over openings: boarded door and two multi-paned cast-iron windows to ground floor. Domed roof cap removed but wooden base frame still in position. Interior: first floor has cast-iron great spur wheel engaging three iron-mortise stone nuts; iron bevel wheel below spur wheel engages bevels on two horizontal shafts with pulleys; 3 sets of tentering gear and one governor; 3 pairs of millstones to second floor. Iron shaft continues to cast-iron wallower at top.

Listing NGR: TL7262835032

KENNETH FARRIES SURVEY

Derelict tower standing (1974) at Gainsford End, behind Houghton's Farm. In 1841, the property was held by John Eley...miller and farmer until at least 1869, when he is said to have spent £2000 on the erection of the tower mill...The mill is said to have had a short working life...gearing was repaired in 1926, but work stopped a year or two later. A technical review is made possible by piecing together data ...and from an examination of the considerable remains on site in 1971.

JOHN

BOOKERS

SURVEY

10/02/1972

A rather remote tower mill, one of the last to be built in Essex. It bears the inscription JLE 1869 and is traditionally believed to have cost £2000. The mill is now without a cap and therefore, of course, without sails, and there is no indication of a brakewheel protruding from the top as there was at White Roothing Tower mill when it was in this state. Much of the other machinery, reported to be in position including the most rare feature – an iron great spur wheel

Present Use: Residential

Condition: Derelict shell

ERO SOURCES: ERO TZ 20/37

SITE BACKGROUND:

Restoration:

The mill has now been partially restored and the restoration documented. Dismantling of the main components of the mill took place on 3rd April 2007. Undertaken by the developers, the work was supervised by Tom Davies and Steve Boulton, millwrights from the firm of R. Thompson & Son of Alford, Lincolnshire. By 14th May 2007, the mill had been entirely stripped out, with the exception of the two first floor beams and the two 'box beams' below second floor level. Reconstruction of the floors, working upwards from the bottom, commenced shortly afterwards. By 28th November, reinstatement of the mill had largely been completed. New floor beams had been inserted from the outside through holes made in the brickwork, which were subsequently filled. All new joists, in pitch pine, had been installed – most in their original positions. The upright shaft, spur wheel and wallower had been cleaned

down, painted, and reinstalled, supported by the original bridging beam which had been sand-blasted clean. The southern layshaft had been refitted in its original mountings, together with the western bridge tree slung from new pine hangers, the stone spindle, stone nut and jacking gear. The best surviving pair of millstones, selected from the eastern and northern pairs, had been refitted in the position of the western stones. SEE REPORT ON ARCHAEOLOGICAL BUILDINGS RECORDING SURVEY OF GAINSFORD END WINDMILL AND ADJACENT CART LODGE, TOPPESFIELD, ESSEX
 Luke Bonwick (Bonwick Milling Heritage Consultancy), July 2008.

Field Survey 2011

28/01/2011

The mill was viewed from the edge of the property and appeared to have been sympathetically restored and a new roof fitted. Now forms part of a residential property.

Present Use: Residential.

Condition: Fully restored but as part of dwelling.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Timber, Brick base, Copper roof (new)	H

ARCHAEOLOGICAL POTENTIAL

Moderate, although much of the internal machinery has been removed the site retains many of its original features.

SITE SIGNIFICANCE

The site has been lovingly restored, with many original features surviving. It is therefore of moderate significance.

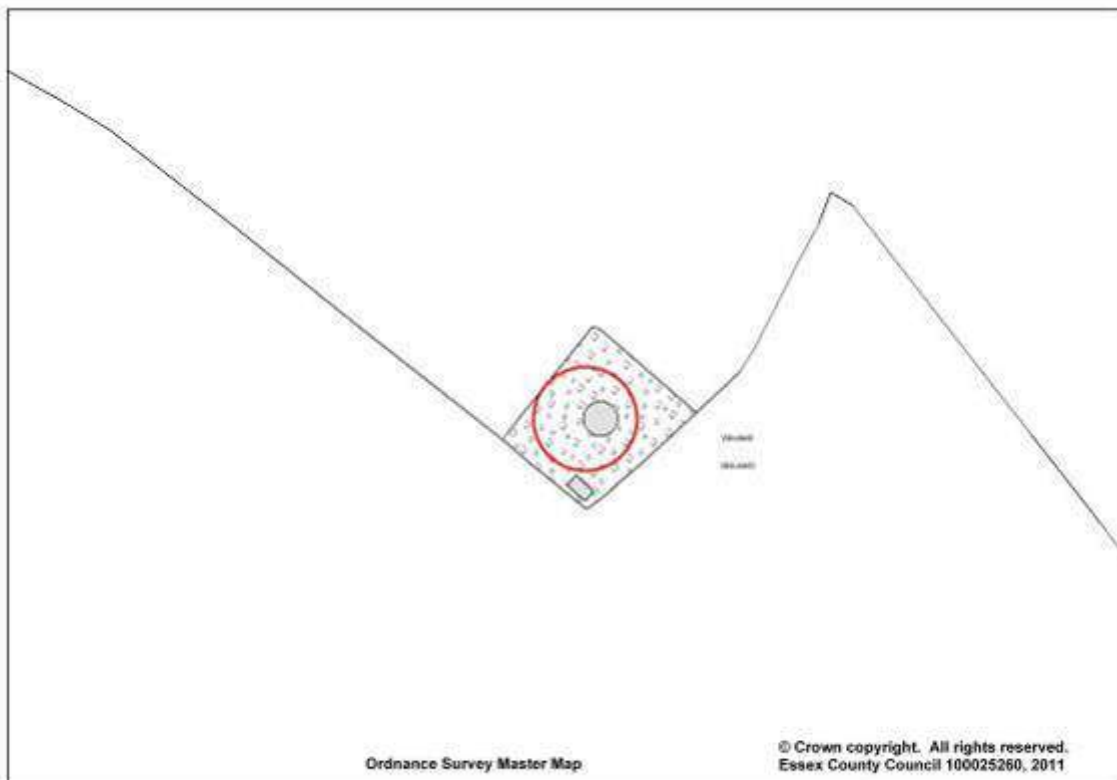
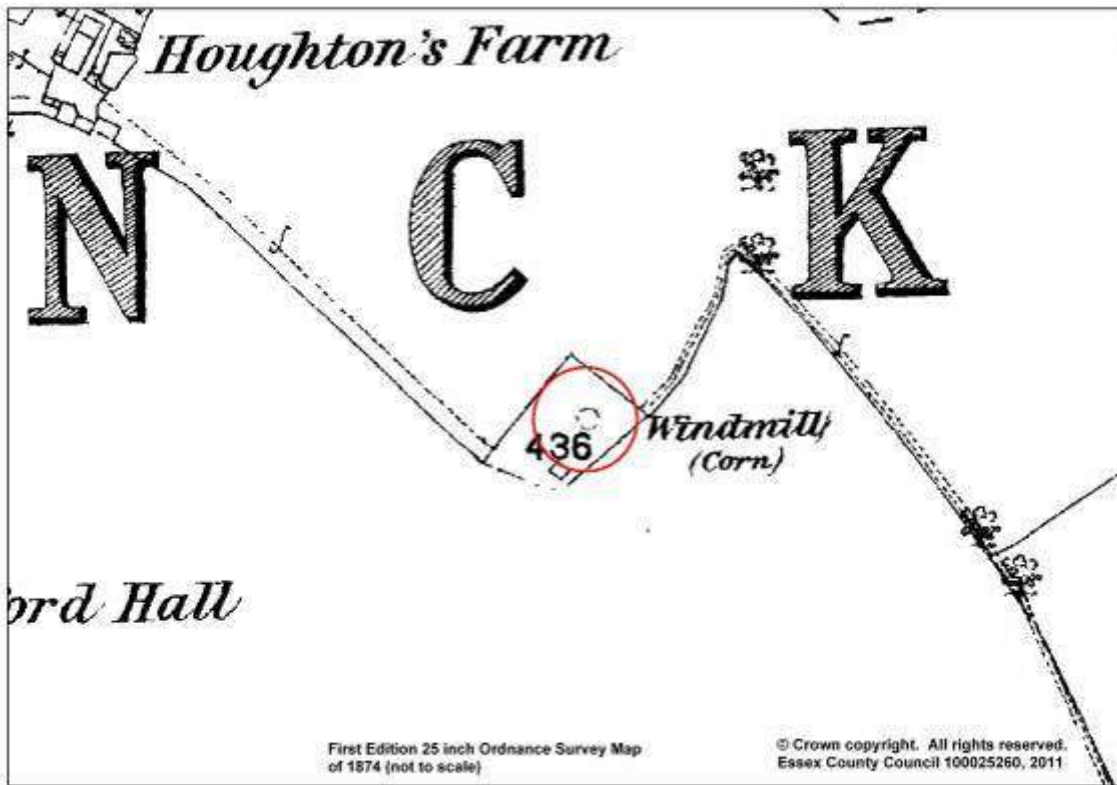
RECOMMENDED ACTION Maintain current listing.

MANAGEMENT The site has been extensively recorded, but should any threats be made to the integrity of the building a further assessment should be made.

GRADING **



Photographs of Toppesfield (Gainsford End) Tower Mill



Brentwood District

Post mills and Roundhouses

EHER	Name	Grade
26612	Mill Green, Fryerning, Post Mill	****
5343	Mountnessing Post Mill	****

Post mills and Roundhouses

SITE NAME Mill Green, Fryerning, Post Mill

PARISH Ingatestone **District** Brentwood

NGR TL6396700741 **EHER** 26612

CURRENT STATUS **Con. Area** Yes **Listed** Grade II* **EBAR** No

STATUTORY LIST DESCRIPTION

INGATESTONE

AND

21/12/1967

FRYERNING

373694

TL60SW MILL GREEN ROAD

723-1/2/426 (South West side)

20/12/52 Mill Green Windmill

(Formerly Listed as: BRENTWOOD MILLGREEN, Fryerning, Fryerning Windmill)

II*

Post mill. 1759, rebuilt in 1959. By Robert Barker. For Lord Petre. On an earlier base and roundhouse. Roundhouse of red brick in Flemish bond externally, English bond internally, mostly painted, roofed with copper; body timber-framed and wholly weatherboarded. On a mound now in the back garden of a private house, Millhurst (not included). Circular roundhouse of one storey; rectangular body with slightly pointed breast, of 3 storeys. The brickwork of the roundhouse is 0.33m thick with 4 projecting piers which house the ends of the trestle; 2 boarded doors; conical roof. The body has in the lower storey 2 fixed multi-pane windows and a boarded door with a window; in the middle storey 2 fixed windows and 2 hinged hatches; in the top storey one fixed window and a removable hatch. The roof is gabled with curved sides. 2 single-shuttered sails, 2 broken; shutters and striking gear missing. Ladder to body, and long tailpole.

INTERIOR: within the roundhouse the post is chamfered with large scroll stops, with 'E.D. 1759' in paint; the struts of the trestle are chamfered with lamb's tongue stops. Both horizontal members are reduced with quarter-round mouldings, and both are scarfed, splayed and tabled with under-squinted

butts and folding edge-wedges, strapped and bolted with iron. In the lower storey of the body are 2 sets of wooden tentering gear and 2 governors, meal bins and spouts; 'E.D. T.D. 1759' is punched on the post (the millers from 1753 to 1852 were called Dearman). In the middle storey are 2 sets of millstones, in head-and-tail layout, with tuns, horses, hoppers and shoes. An iron windshaft carries a clasp-arm wooden brakewheel and tailwheel, each with wooden stone nuts and quants; the brakewheel disintegrated in a gale in 1976, and a new one is being constructed at the time of inspection, May 1989. Machine drive shaft and pulleys, chain drive to sack hoist, striking gear, wooden brake lever, chutes. In the top storey are corn bins, sack hoist and pulleys, and the upper half of the brakewheel.

HISTORICAL NOTE: shown in Chapman and Andre's map of 1777. Expenditure on repairs and equipment is recorded in the Petre archives from 1802-1903 (Essex Record Office). Structurally the mill was rebuilt in 1959 for the then owner RF Collinson; the machinery was carefully preserved and is mostly original. There are no grounds for describing this as Fryerning Windmill, as in the 1976 list; the site has always been in the historical parish of Ingatestone, and it is documented in the Petre archives relating to Ingatestone parish. This is the most complete example of a post mill with head-and-tail layout in Essex.

(Essex Record Office: D/DP A.90 A.91 A.141 A.145 A.376; Farries KG: Essex Windmills, Millers and Millwrights: 1982-: 15-28; Farries KG: Essex Windmills, Millers and Millwrights:1985-: 58-9).

Listing NGR: TL6396700741

KENNETH FARRIES

Post mill, succeeding another, possibly a short distance to the east. Preserved in the garden of 'Millhurst'. Stands 800 yards north of Fryerning church and west of the lane to High Wood...The map of Chapman and Andre gives due recognition to...the present mill, which stands on a low artificial mound. It was largely rebuilt in 1959 by the new owner, Mr R.F.Collinson, suitably commemorating the exact bicentenary of its erection in 1759 by Robert Barker, millwright, of Moulsham, Chelmsford. 'E D 1759' and 'R F COLLINSON 1959' are recorded on the main post and on the crowntree respectively. In Volume II the mill is more minutely described than any other in the county.

JOHN BOOKERS SURVEY

10/02/1972

Commonly attributed to Fryerning parish but technically in Ingatestone. This is a weather boarded postmill on a brick roundhouse completely restored in 1960 at the expense of the owner. It was a 'head-and-tail' mill – in other words there were two sets of stones, one driven from the brake wheel and one from the tail wheel. The main post bears the painted initials E.D. above the date 1759, which is interpreted either as the date of an accident to the miller or the date of the building. The latter seems more likely, but there were earlier mills on the site.

Present Use: Preserved monument

Condition: Very good

ERO SOURCES: ERO TZ 20/37

SITE BACKGROUND:

See HISTORICAL NOTE above, under Statutory List description.

Field Survey 2011

24/05/2011

A very difficult building to access. Fenced in on private land and hidden behind a screen of trees. Visited in the recent past by Vince Pargeter (Pers.com.) and it is understood that much of the original internal machinery remains.

Present Use: Ornamental

Condition: Fully restored but in the grounds of a private dwelling.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post mill	C19	Wood, iron	H
Roundhouse	C19	Brick	M
Sails	C19	Wood, iron	H
Internal Machinery	C19	Wood, iron	H
Windmill mound	Unknown	Unknown	M

ARCHAEOLOGICAL POTENTIAL

Still retains some elements of its technology and furniture but has lost most. The building is structurally intact, has not been overly compromised by unsympathetic enlargements or alterations.

SITE SIGNIFICANCE

An important post mill with possible surviving internal features, which has not been converted or

significantly altered.

RECOMMENDED ACTION

The site is a private residence and should maintain its current listing.

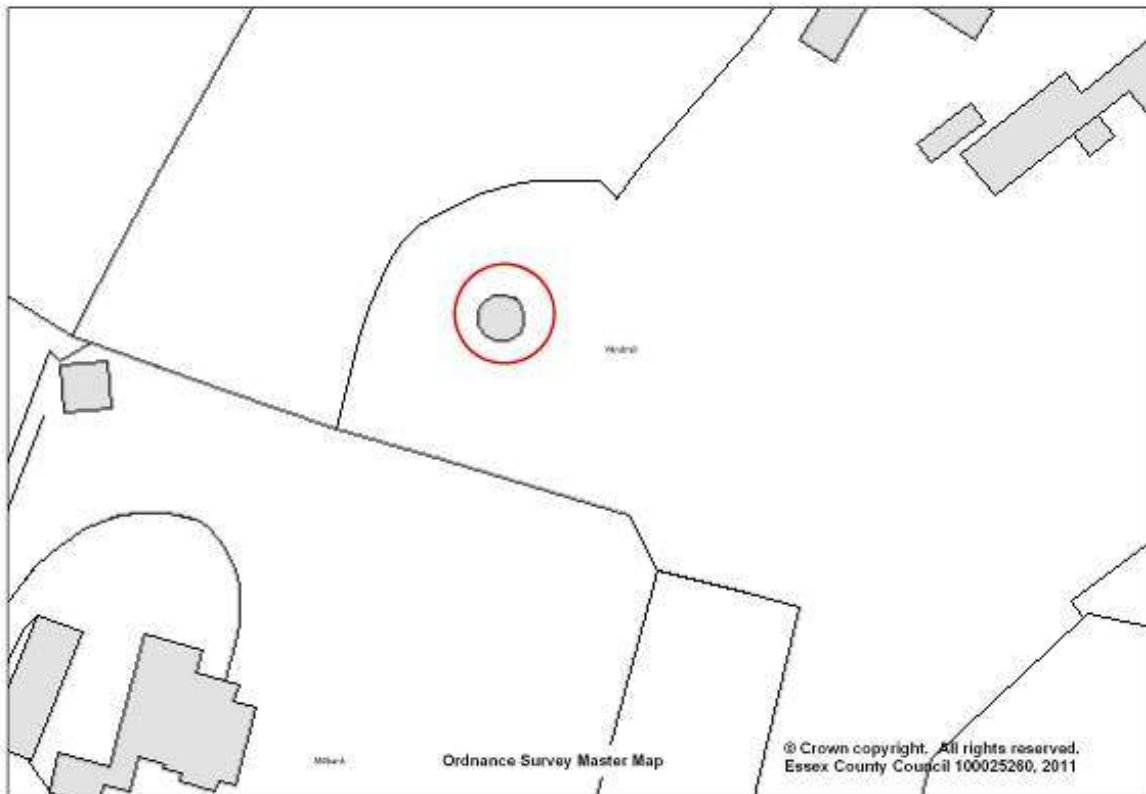
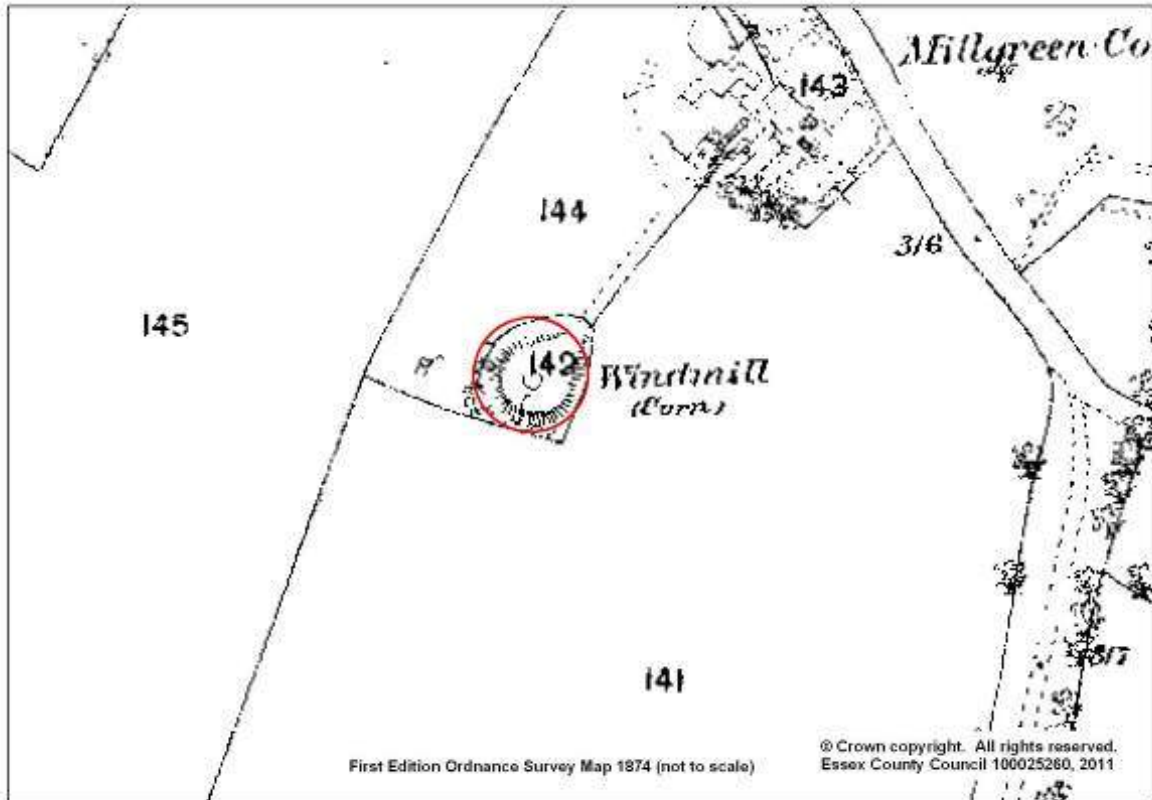
MANAGEMENT

The windmill is privately owned. Should the opportunity present itself an internal inspection and/or historic building survey is recommended in order to assess and record levels of archaeological/historic and technological survival within the windmill.

GRADING ****



Photograph of Mill Green Post Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Mountnessing Post Mill

PARISH Mountnessing

DISTRICT Brentwood

NGR TL 632980

EHER 5343

CURRENT STATUS Con. Area

Listed Grade II*

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

MOUNTNESSING

TQ69NW ROMAN ROAD
723-1/6/473 (North side (off))
29/12/52 Mountnessing Windmill
(Formerly Listed as: BRENTWOOD
THOBY LANE, Mountnessing
The Windmill)

II*

Windmill. 1807. For the Agnis family, owners and millers. Restored 1979-83. Roundhouse of red brick in Flemish bond, roofed with sheet metal over boarding; brick timber-framed and weatherboarded, roofed with sheet metal over boards. Roundhouse 16-sided, with two C20 plain boarded doors, conical roof. Buck slightly bayed on weather face. Two C20 fixed lights in each side, and 2 more at rear. Tailpole and steps to C20 plain boarded door at rear. Barrel vault roof. 4 single shuttered spring sails. Sited on a mound. The original cross-trees, quarter bars and post are mounted on stepped brick piers (the W pier repaired, all the packing pieces renewed, bolted splints on 3 of the quarter bars and cross-tree ends). Original tail pole, original large timbers to steps, treads renewed. The buck was rebuilt 1979-83 by Vincent Pargeter, staff millwright to Essex County Council, retaining the original crown-tree, side girts, weather beam, spindle beam, tail beam, 2 sills, and some lesser timbers; the left side girt is reinforced internally with a rolled steel joist. 2 pairs of under-driven head stones of French burr; one runner has been removed for demonstration. Cast-iron windshaft from the working mill, but probably second-hand when originally installed there. Wooden brake wheel and wallower rebuilt, retaining parts of the originals. All the internal fittings and machinery have been built since 1979 by Peter Stenning of Kent and Richard Seago of Norfolk; some framing of the original bins retained and reused. Many graffiti on the post include pictures of windmills, an inscription 'Penny, 1821' and another 'W Cadman, 1827'. Painted date 1807 on crown-tree.

HISTORICAL NOTE: the mill was built and operated by the Agnis family continuously from 1807 to 1924, and again briefly 1932-3, acquired by Mountnessing Parish Council in 1956, and later by Essex County Council. It is the second windmill in Essex to be restored to working order, the first being at Aythorpe Roding. New machinery and fittings. (Farries KG: Essex Windmills, Millers and Millwrights: 1985-: 80-83; Historic Buildings in Essex 3: Wooding R: Mountnessing Windmill: 1986-: 2-4; Wooding R & Pargeter VG: Mountnessing Windmill, its history, restoration and how it works: undated).

Listing NGR: TQ6309997967

KENNETH FARRIES

Post mill. Preserved by Essex County Council. Stands close to the village crossroads between the Colchester road and the road to Doddinghurst. The mill is placed conspicuously

on a low mound partly encompassed by a ditch and a hedge, and had at least one predecessor. The surviving two mid-county post mills – at Mill Green and Mountnessing – are poles apart in important respects. Mountnessing differs in having a later-style construction with fewer refinements.

JOHN BOOKERS SURVEY

10/03/1973

This mill, which stands near to what was, until 1973, the A12 trunk road through Mountnessing, is probably the most well-known preserved windmill in the county and certainly the most photographed. Two sails are missing. The mill was working until about 1930. The roundhouse has sixteen sides; it is reported that there was originally a thatched roof, removed in 1917. The crowntree is dated 1807 which is usually taken as the date of the mill as a whole. The windshaft is cast iron and the gears are wood to wood. For many years until its closure the mill was worked by the well-known Agnis family.

Present Use: Disused

Condition: Preserved but out of repair

ERO SOURCES: D/DU 197/5 1861

SITE BACKGROUND:

Mountnessing mill is probably the best known in Essex because of its location near the busy A12 road. The mill dates from about 1807, but its site is older, there having been a mill at Mountnessing as early as 1477. This mill was one of the first in Essex to be preserved for posterity, having been taken over by Mountnessing Parish Council a few years after it stopped working commercially in 1932 or 1933. It had then been worked by members of the Agnis family for well over a hundred years. The exterior of the mill was restored when the Parish Council created the adjoining playing fields to commemorate the coronation of King George VI in 1937. In 1956 the mill's ownership passed to the County Council who have since maintained it. Restoration to full working order was completed by the County millwright in 1981. Mountnessing Mill was described by one of the Agnis family as a 'double-header', with two pairs of millstones at the head of the mill. For all its working life it was winded laboriously by the miller pushing it round by the tailpole. It has spring sails, in which the shutters are closed against the force of the wind by large semi-elliptic springs resembling those used on older cars. These sails are easier to set than the cloth-covered type but less simple to operate than patent sails. Until the early part of this century the sixteen sided roundhouse was thatched but the thatch was discarded together with the rats harboured within.

Field Survey 2011

28/02/2011

The mill is regularly visited and inspected by the Essex County Council mills team and both the body and the roundhouse are maintained in good order. Although the roundhouse wall has cracked this is due to long term settlement and does not affect the integrity or longevity of the structure. The spring sails are turned regularly, and individual shutters are regularly removed, cleaned and painted. The springs function and the sails can be opened and closed for demonstration purposes. The mill can be turned into the wind using the tail pole (winding the mill) and the mill body is fully accessible to the general public. The milling machinery, including the brake wheel, spur wheels, mill stone sets, bridge trees and tentering gear are all maintained in working order. A shallow cart track crosses the mound diagonally to the loading stage on the wooden steps.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post mill	C19	Wood, Brick	H
Roundhouse	C19, modified C20	base Brick, wood, aluminium	H

Sails	C19	Wood, iron	H
Machinery	C20, C19	Wood, iron	H
Windmill mound	C17 and earlier		M

ARCHAEOLOGICAL POTENTIAL

This is a well preserved windmill with working machinery and a mound. Evidence from elsewhere suggests that material from older mills could exist within the mound.

SITE SIGNIFICANCE

A good example of an post-mill windmill, with lots of surviving features and continuity of occupation possibly since the medieval period, with a windmill having been recorded in the parish, almost certainly on this windmill mound, in 1477.

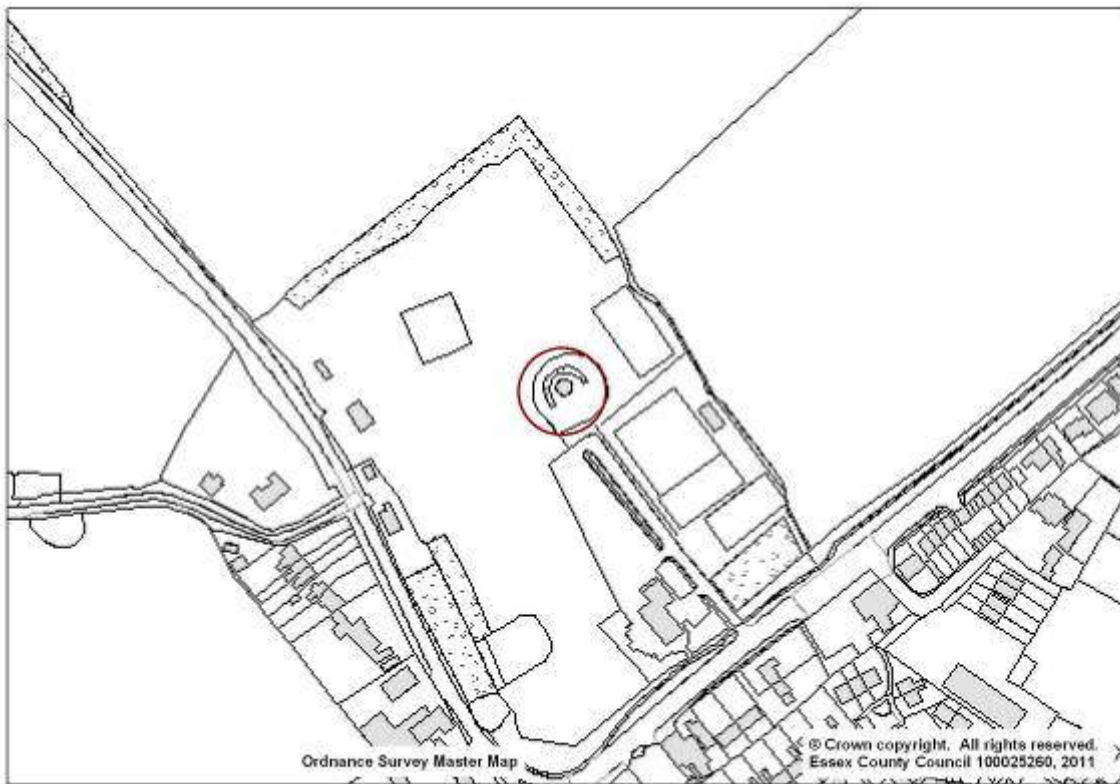
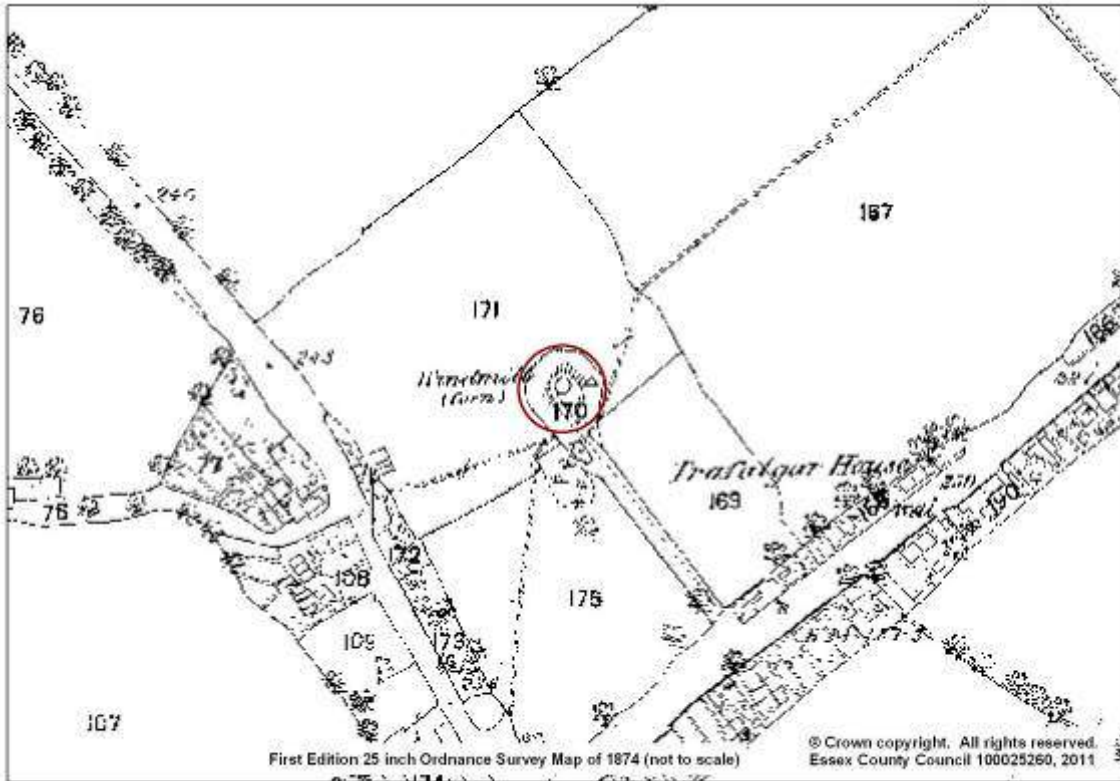
RECOMMENDED ACTION Maintain current listing. Given the significance of the mill, future proposals to convert it to residential use should be discouraged.

MANAGEMENT Prior to any significant future construction work to the mill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ****



Photograph of Mountnessing Post Mill (Google Maps Street view, retrieved on August 2011)



Chelmsford District

Post mills and Roundhouses

EHER	Name	Grade
47634	Chatham Green Post Windmill Roundhouse	**

Smock Mills

1058	Mashbury Smock Mill Base	*
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Tower Mills

5429	Stock	****
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Post mills and Roundhouses

SITE NAME Chatham Green Post Windmill Roundhouse

PARISH Little Waltham

DISTRICT Chelmsford

NGR TL 715152

EHER 47634

CURRENT STATUS Con. Area No Listed Grade NL **EBAR**

STATUTORY LIST DESCRIPTION

The building is not listed.

JOHN BOOKERS SURVEY

23/11/1971

Roundhouse of former post windmill, Chatham Green in private ownership. Two storey brick roundhouse with two hatch doors surviving from a post mill (of no great antiquity) now in the car park of the Windmill Inn. The mill itself was down by 1931.

KENNETH FARRIES SURVEY

Great Waltham. Post Mill. Roundhouse preserved adjacent to the Windmill Inn, Chatham Green, 300 yards west of the Braintree road (A131). Formerly in Great Waltham, now in Little Waltham(1983). TL 716152...The roundhouse is substantial, being two-floored and 24ft. internal diameter, built entirely separate from the four brick piers, behind which it passes. It stands 12ft. high to the eaves, and is stepped inwards by 2½in. at 7ft. over ground level. Two windows and a stable door were provided on each floor; the absence of a second door at either level suggests a tall body with sails revolving well over the ground. The four brick piers are lightly stepped on all four faces to give an upward taper and are each over 6ft. tall, so giving freedom of movement beneath the crosstrees. These are still in position, with part of the main post and small sections of the quarterbars. ..the ends of the crosstrees in at least two cases were weathered with lead. The base today contains two floors, of which the ground floor has at various times served as a pigsty, a dance floor and a beer saloon. The mill body was presumed removed shortly after 1902.

Present Use: Bedroom accommodation on two floors for adjoining pub and restaurant

Condition: Roundhouse well preserved externally. The brickwork piers and the entire trestle described by Farries have been removed since his survey.

ERO SOURCES:

D/CT 379A 1840. The mill was listed in the Great Waltham Tithe Apportionment

SITE BACKGROUND:

According to Farries, the first references noted to Chatham Green mill dated from 1829, when it entered the land tax records, and more particularly from 1833, when on June 21st the proprietor, Thomas Child, inserted an auction notice in the Chelmsford Chronicle referring to "a capital new erected Post Windmill situate at Chatham Green...drawing 10 yards of cloth, the going gears of the best description, containing a wallower nut, spur wheel, and stone nuts, with two pairs of French stones, on centre irons, cast iron stone boxes and bridging ditto, sack tackle, flour mill and jumper. Also a dwelling house. The detached buildings comprise a bake office with new erected 5-bushel oven and patent irons complete."

Field Survey 2011

28/04/2011

According to the present owners, the Windmill Inn closed in 1993 after which the roundhouse

and the surrounding buildings deteriorated significantly. It was reopened in 1997 after considerable careful restoration. Other original buildings comprise the bake office and dwelling house, as described in the 1833 auction details and which now form part of the pub. The roundhouse is in a good state of repair externally. Access to the ground floor bedrooms is via a short corridor from the ground floor entrance. Access to the first floor is through a separate external staircase to the rear of the building. However, the building has been converted to ensuite bedroom accommodation on both floors. No trace of the piers or trestle was found within the ground floor rooms and it is thought that these were stripped out during the conversion. The loft contains the water tank for the bedrooms and another visit may be necessary to thoroughly check for any remaining timbers there.

A local resident recalls seeing the body of the mill lying across the road after collapsing in a westerly gale in 1931, and not removed shortly after 1902 as Farries suggests.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C19	Brick, Tile	M

ARCHAEOLOGICAL POTENTIAL

Due to conversion and reuse, very little internal machinery remains.

SITE SIGNIFICANCE

Typical 19th century milling and local bakery complex similar to Belchamp Walter, West Mersea, Clavering, Stock and others. Internal feature removed during conversion to residential, but externally in good condition.

RECOMMENDED ACTION

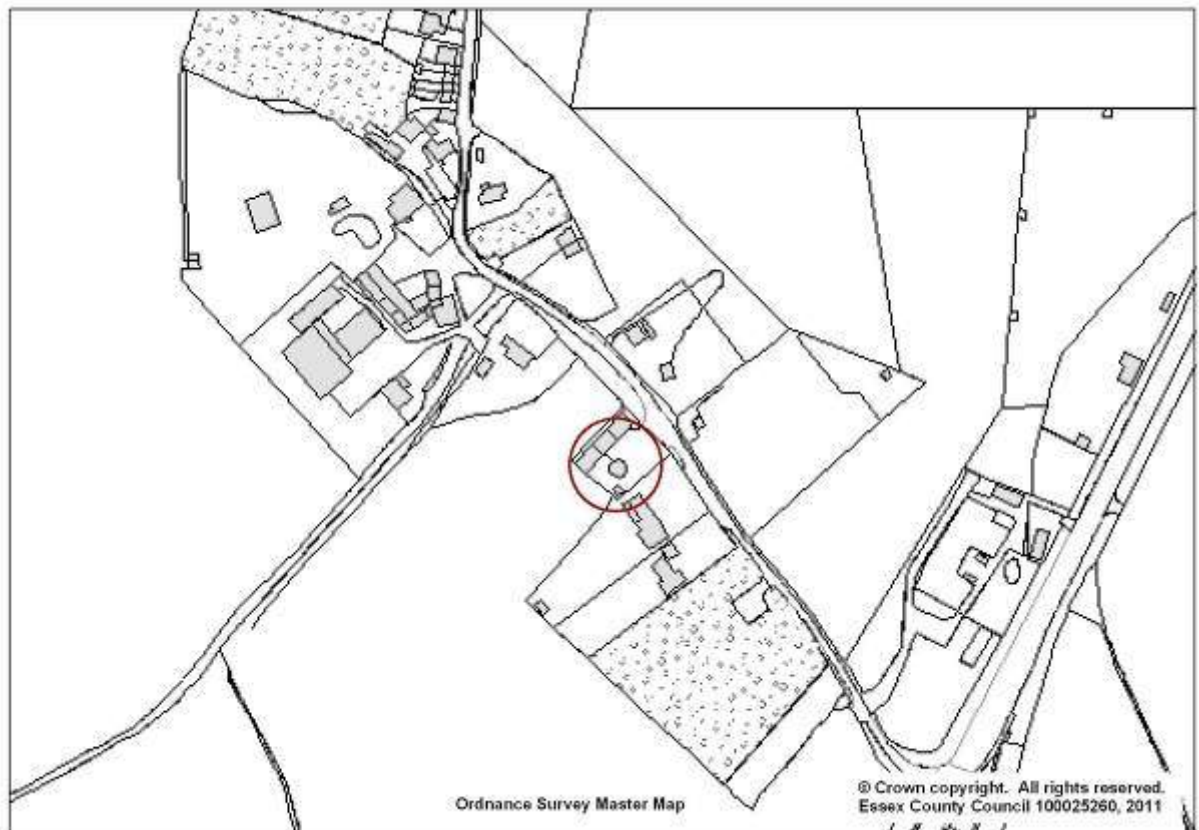
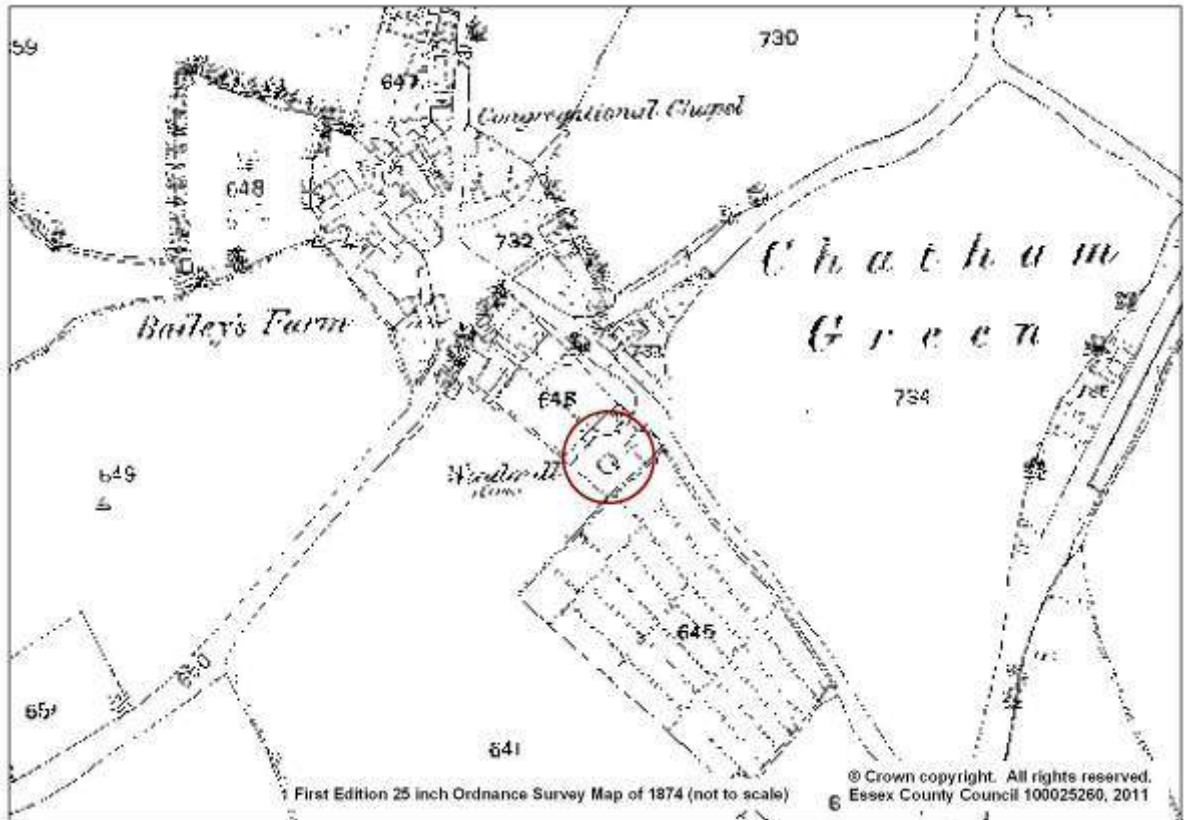
Unfortunate loss of the historically-important trestle substructure at such a late date, but still a well preserved and locally important monument. Would be a good candidate for local listing.

MANAGEMENT The roundhouse is presently in use as a private residence and as such is well maintained. Should the opportunity present itself an internal inspection and/or historic building survey is recommended in order to assess and record levels of archaeological/historic and survival within the building. A good photographic record should be made.

GRADING **



Photograph of Chatham Green Post Windmill Roundhouse (Google Maps Street view, retrieved on August 2011)



Smock Mills

SITE NAME Mashbury Smock Mill Base

PARISH Mashbury

DISTRICT Chelmsford

NGR TL645133

EHER 1058

CURRENT STATUS **Con. Area No** **Listed Grade** NL **EBAR** No

STATUTORY LIST DESCRIPTION

None

KENNETH FARRIES SURVEY

Mashbury. Smock Mill. Base stands between 'Mashbury Mill House' and Old Mill Cottage, on the west side of Pleshey Road...The smock mill may have been built following the destruction of an earlier post mill by a storm in January 1825. By the surviving brick base it is seen to be of modest proportions. The opposing octagonal sides are 16ft. across internally and 8ft.6in. high. Baker of Danbury made an estimate for repairs to the mill in September 1890. These totalled £12 10s. , and the specification shows the mill to have possessed a stage with a latticed floor, at least one pair of shuttered sails and an iron upright shaft. ...In 1890 it was also offered for sale by auction as a 'freehold smock-tower windmill', with fan tackle and patent sails, driving two pairs of French Burr stones. ..The mill stood idle until it was burnt down accidentally on 28th November 1896...The base has served as a small garage and store, having an enlarged opening where the mill door once faced east, and was re-roofed in 1975.

JOHN BOOKERS SURVEY

Not included.

Present Use: Used as office and store.

Condition: Very good condition externally and internally. Newly re-thatched roof is carried low over the eaves and internally lined with plasterboard and painted. Now used as a domestic store. Brickwork externally repointed by the present owner using a sympathetic lime mortar mix. An electricity supply has been connected and strip lighting fitted.

ERO SOURCES:

D/CT 230 1840 indicated on the Manuden Tithe Apportionment.

SITE BACKGROUND:

See history in Farries.

Field

Survey

2011

30/04/2011

This is an octagonal smock mill base of simple design and considerably removed in architectural accomplishment from the bases at Bulmer and Frost's Mill at Halstead. Brickwork elevations with a single step to the external elevation.

The building is located on a secure private property but can be seen from the public road. The brickwork has recently been repointed in lime mortar and the base has been dry lined internally. The main horizontal beam which once carried the stone floor is heavily charred on the upper face from the fire that destroyed the upper part of the smock mill in 1896 and there are sockets in the beam where other building components once fitted.

There is a pair of millstones and set of stone furniture from Mashbury Mill in Colchester Museum stores.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill base	C19	Wood, brick, tile	M

ARCHAEOLOGICAL POTENTIAL

The smock mill base has been used for domestic storage and all internal fixtures have been removed.

SITE SIGNIFICANCE

Given the removal of all fixtures, the significance is low.

RECOMMENDED ACTION None

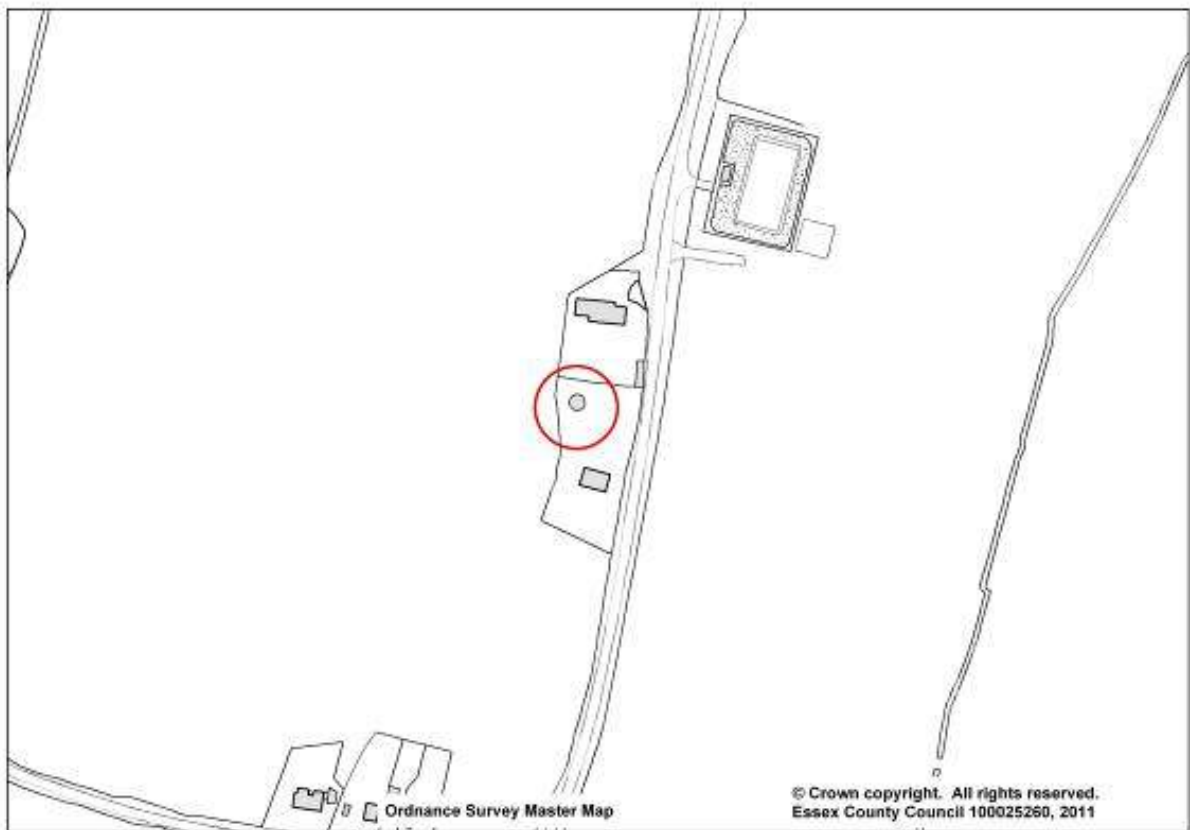
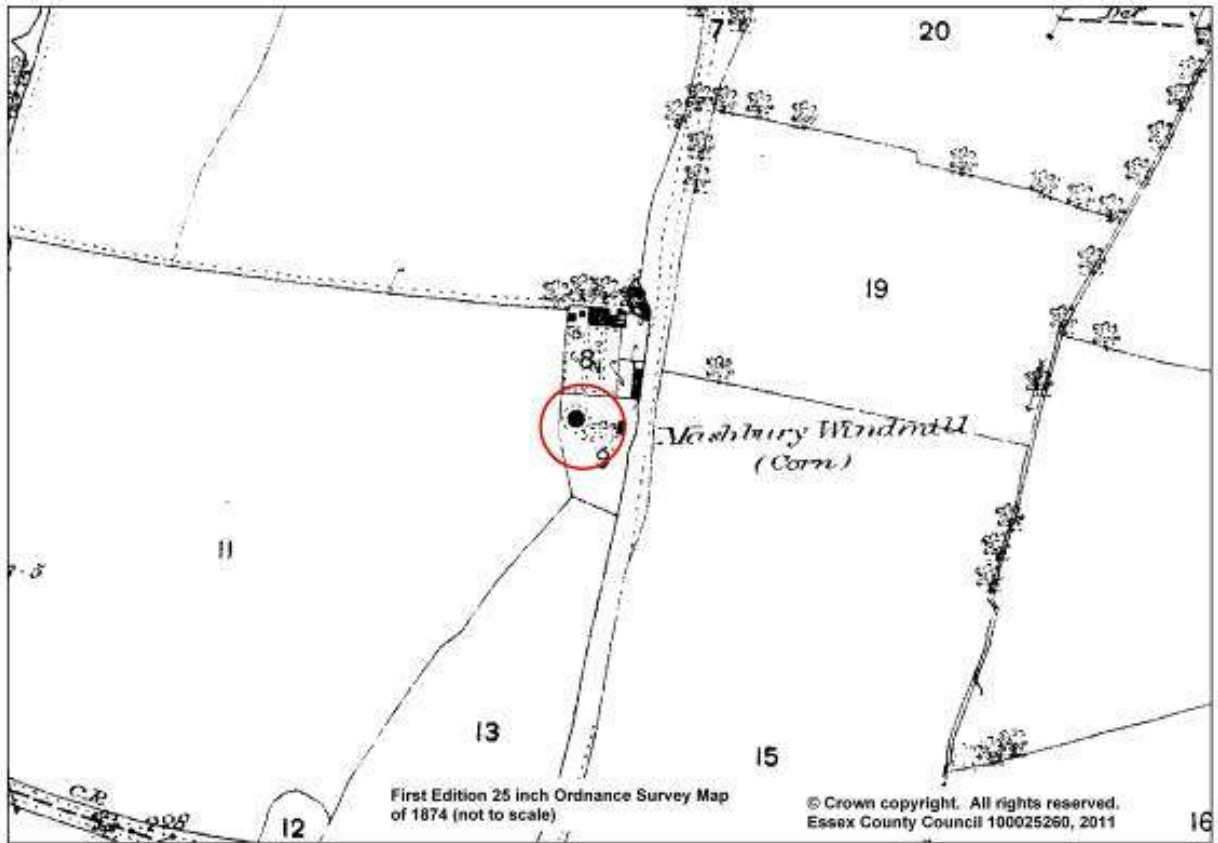
MANAGEMENT

The owner is keeping the building well maintained, as well as researching its history, and plans to set up a small wind turbine nearby to generate electricity. If any planning applications proposed demolition, a building recording should be carried out.

GRADING *



Photograph of Mashbury Smock Mill Base Windmill Roundhouse (Google Maps Street view, retrieved on August 2011)



Tower Mills

SITE NAME Stock Tower Mill

PARISH Stock

DISTRICT Chelmsford

NGR TL 698988

**EHER
EHUID** 5429

CURRENT STATUS Con. Area No

Listed Grade II*

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

1. STOCK MILL LANE

5213

Windmill

TQ 6998 36/504 10.4.67.

II*

2.

A fine example of a red brick circular tower mill with a weatherboarded boat-shaped cap. The sails are still in position although the mill was converted to steam in the early C20. It is no longer working but has been well restored. The mill is probably of the C18 or early C19. Listing NGR: TQ6981598781

KENNETH FARRIES SURVEY

The tower mill is preserved by Essex County Council and stands on the east side of Mill Lane 130 yards north of its junction with Mill Road leading east towards Wickford Stock mill was built c.1800 and is preserved by the county council with the principal machinery intact. It can prove a disappointment to those expecting to find the original contents in situ, for such include little more than the brake wheel rim, major and minor floor beams and bearers, a stone raising bollard, and probably some items connected with the sack hoist. Most of the remainder is of comparatively late date. Regarding the method of driving the stones...There was one change only – from overdrive on the present bin floor to underdrive on the floor below, this also facilitated the application of engine power.

JOHN BOOKERS SURVEY

13/04/1971

An interesting mill on a site of unusual confusion where there were once several mills in a group. There are a number of stories, largely apocryphal, as to the circumstances of their positioning and removal. There is only evidence on the ground today of one mill – the tower mill in question- which was probably built around 1800. It is now in good exterior repair, since it was acquired by the County Council in 1951, but the fantail has been removed. Inside some smaller pieces of machinery are missing but much of the larger equipment, like the brake wheel with eight iron arms, wooden ring and cogs, remain. An unusual feature are the millstones – much larger than average. This mill has the interesting feature of an exterior iron pulley which was used to receive a belt drive from a portable engine.

Present Use: Preserved

Condition: Good

ERO SOURCES:

SITE BACKGROUND:

The sole survivor of a group of three mills on Stock Common, the tower mill is thought to have been built about 1816, joining a post mill which had been there since 1795. In 1845,

following a marriage between local milling families, another post mill was brought to complete the group. The two post mills were abolished in the 1890's and today the tower mill, which once shared the wind on the open common, is hemmed in by bungalows and trees. In its early days the mill carried cloth sails which were set and turned to wind from a stage surrounding the tower at first-floor level, evidence of which still exists in the brickwork of the tower. In about 1890 major internal alterations took place so that an extra pair of stones could be driven. This entailed locating the three pairs of stones at a level one floor lower than before and the provision of some internal reinforcement. Of the three large vertical strengthening timbers, two seem to have been cut from the post of a windmill – perhaps one of its erstwhile neighbours. By 1902, the mill had been altered again so that steam power could be used to drive the stones in calm periods, but like all windmills it was overtaken by new technology. It ceased work finally in 1930 or thereabouts. The mill house was destroyed by bombing during the Second World War. The mill is an excellent example of C19 tower mill construction and millwrighting practice. It was restored to working order under the direction of Vincent Pargeter, the County millwright, between 1991 and 1993.

Field Survey 2011

28/02/2011

The mill is regularly visited and inspected by the Essex County Council mills team and maintained in good order. The cap and fantail mechanism are greased regularly and the patent sails are turned for demonstration purposes. However the mill is on a very confined site with housing in very close proximity on three sides. The mill body is fully accessible.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, Brick, iron	H
Sails	C20	Wood, iron	M
Machinery	C19, C20	Wood, iron	H

ARCHAEOLOGICAL POTENTIAL

The windmill is in good working order and many of the original features and machinery survive and work.

SITE SIGNIFICANCE

Highly significant windmill, one of the best examples of its kind in Essex and the country.

RECOMMENDED ACTION Maintain current listing.

MANAGEMENT Prior to any significant future construction work to the windmill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ****

Colchester District

Post mills and Roundhouses

EHER	Name	Grade
47642	Mayland, Mr Cardinals Mill Roundhouse	*/**

Tower Mills

8199	Messing Maypole	***
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Post mills and Roundhouses

SITE NAME Mayland, Nr Cardinals Mill Roundhouse

PARISH West Mersea

DISTRICT Colchester

NGR TM015133

EHER 47642

CURRENT STATUS Con. Area No **Listed Grade** NL **EBAR**

STATUTORY LIST DESCRIPTION

KENNETH FARRIES SURVEY

Post mill, stood on Layer Heath (Malting Green) on the north side of Abberton Road and 100 yards west of the road to Layer (water) Mill. TL 978202. The...mill after removal to Mersea Island. Stood on the west side of Mill Road about 100 yards north of the fountain public house...A press account in 1892 stated that the post mill had been moved about sixty years before...to West Mersea....The final years ...ended in 1917, and the wooden body was taken down by W.Fenn in 1919...In 1973, the roundhouse was in use as a shop, but was later demolished.

JOHN

BOOKERS

SURVEY

04/08/1971

Roundhouse of former post windmill. Fred G.Smith & Son, bakers and confectioners. Thoroughly modernised roundhouse, rendered, brick porch, large windows, etc. Identifiable only for what it was by overall shape and proportions, and the fact that this is the known site of a windmill. Interesting association still with baking trade. Two millstones are set in the wall of house at entrance to mill yard; one bears ironwork by Bryan Corcoran, 31 Mark Lane, London.

Present Use: Part of bakers premises.

Condition: Very good – very much altered.

ERO SOURCES:

SITE BACKGROUND:

Field

Survey

2011

28/05/2011

The roundhouse is in a similar state to what it was at the time of John Bookers survey in 1971. Although much altered with a domestic door and windows, the structure of the roundhouse appears intact and is well looked after. The associated house appears to be modern.

SITE COMPONENTS

Term

Period

Material

Importance (H/M/L)

Roundhouse

C19

Brick

L

ARCHAEOLOGICAL POTENTIAL The roundhouse has been renovated and altered over the years, with very little original fabric remaining.

SITE SIGNIFICANCE

Although heavily converted and modernised, the external structure survives and appears well cared for. It is not significantly interesting in terms of design or surviving features.

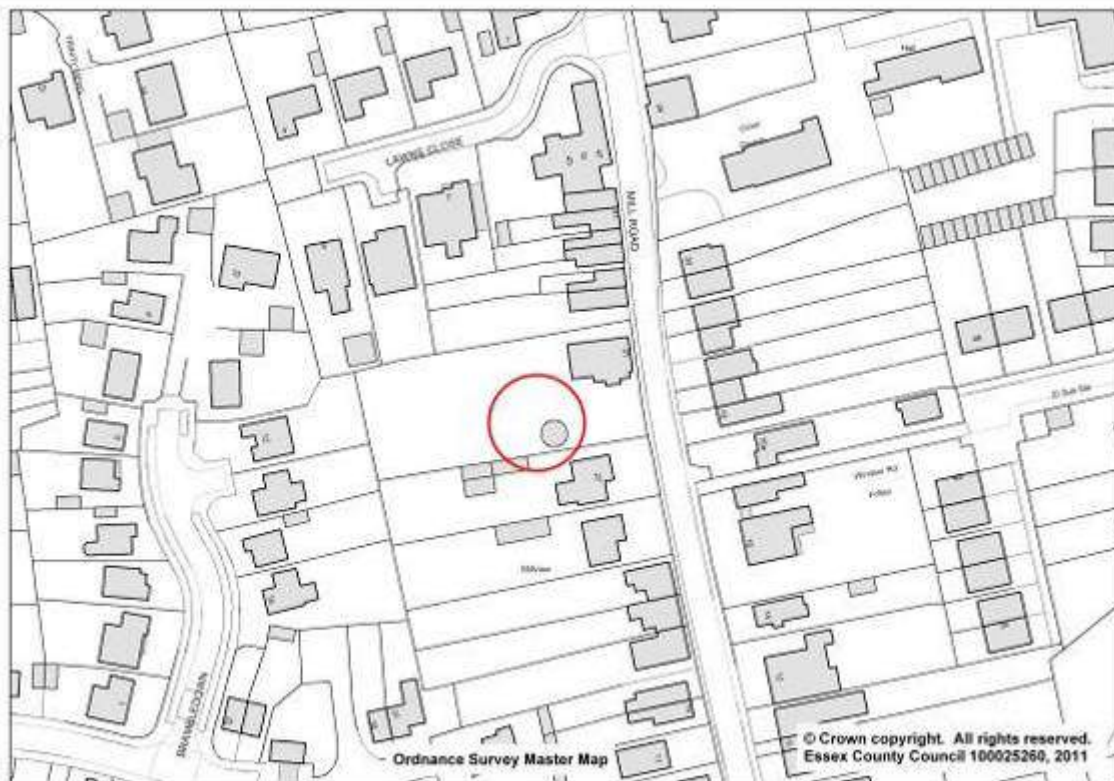
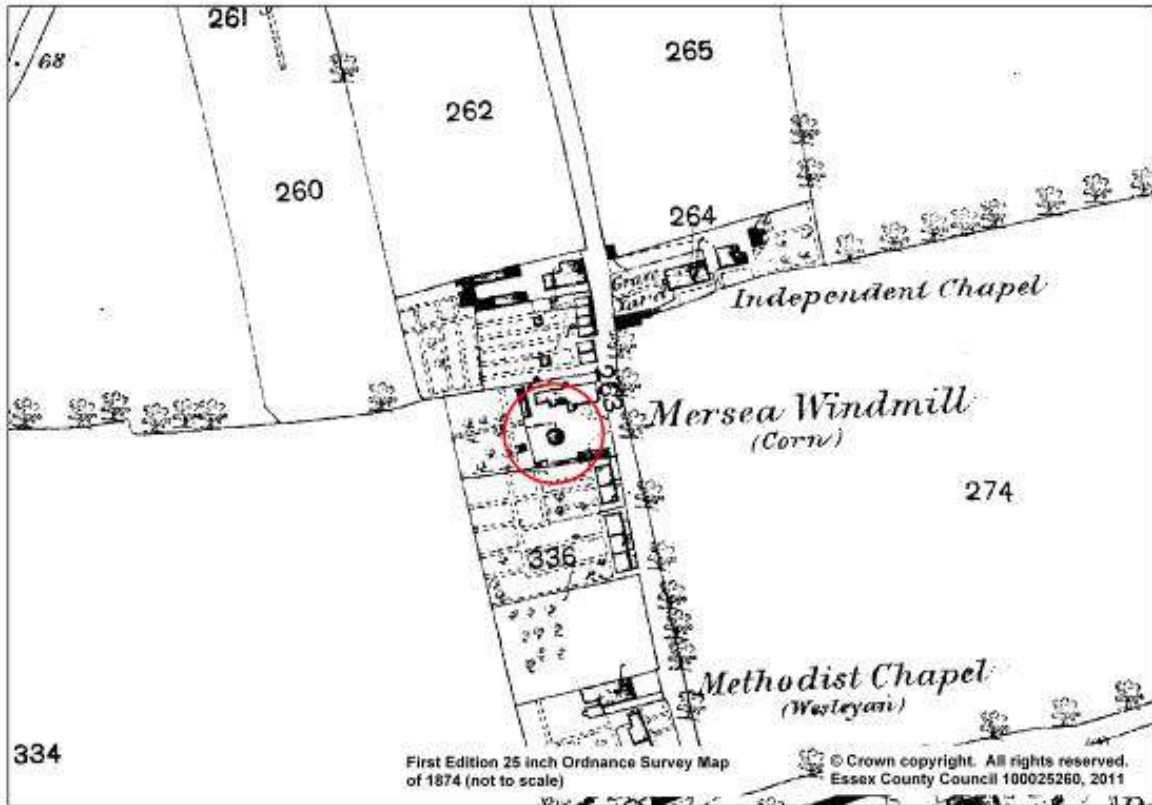
RECOMMENDED ACTION The roundhouse may warrant inclusion on a local list.

MANAGEMENT Presently in use as private residence and as such is well maintained. Should the opportunity arise, an internal inspection should be made to assess any survival of original fixtures.

GRADING */**



Photograph of Mayland, Nr Cardinals Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



Tower Mills

SITE NAME Messing Maypole Tower Mill

PARISH Tiptree

DISTRICT Colchester

NGR TL 894166

EHER 8199

CURRENT STATUS Con. Area No **Listed** Grade II **EBAR** No

STATUTORY

LIST

DESCRIPTION

23/06/1952

TIPTREE CHURCH ROAD
5214 Windmill

TL 81 NE 15/42 23.6.52

II

2.

Five storied, red brick tower mill, with weather boarded cap. Stone over entrance door is inscribed: TGE 1775 and there is another stone: GDER 1836. Two bricks are said to have inscriptions: WS 1774 and ET 1774. Modern casement windows in late C19 openings, Sails and fantail removed, and mill now used as a dwelling.

Listing NGR: TL8978715926

KENNETH FARRIES SURVEY

Tower mill. Known as Tiptree Mill. Preserved and used as a residence. Stands a few yards south east of the intersection of the Maldon and Inworth roads. The wind driven millstones and fittings were removed about 1973...By 1975 the mill had been converted into a house, but major items of machinery, including the magnificent wooden upright shaft and the compass-arm great spur wheel, had been retained. The mill was built in 1775 by John Matchett, a Colchester millwright, and was an ambitious conception for this area, where the post mill was the stock product. ...The post and tower mills, with dwelling houses adjoining, originally comprised one estate. In 1824, the 'much admired' brick tower mill was given as 36ft. in diameter, containing 5 lofty floors, two pairs of French stones of the best quality and three flour mills. (Photograph taken c.1900 shows chimney of adjoining steam mill which is not mentioned in the text).

JOHN BOOKERS SURVEY

07/04/1971

One of the very few windmills anywhere to be undergoing conversion for domestic use with the machinery largely intact. It is fortunate that this mill (which was last worked in about 1955, with the aid of an engine not only has a bright future but good documentary and archaeological evidence of its history: a stone above the door is inscribed GT, below that E two ducks, below that 1775 and WS 1774. another stone is inscribed GDER 1836.

Although the sails are reduced to the stocks and whips, the five-floor mill is otherwise well-preserved; the octagonal cast-iron windshaft has come from a post mill.

Present Use: Under conversion to house premises

Condition: Under renovation

ERO SOURCES: ERO D/OU 491/24 1824 Sale catalogue

D/OU 491/43 1776-1839 Deeds incl draft leases, building receipts, 1776 , inventory, c.1805 and sale cat. as above

SITE BACKGROUND:

This attractively named mill, built to extremely high standards in 1775, was modernised late in the C19. It once stood on open common with a post mill but is now surrounded by modern housing estates. Messing Maypole Mill stopped working in 1920 and was converted into a house in the sixties.

Field Survey 2011

28/02/2011

This is the largest tower mill in Essex and a restoration programme is being planned partly as a result of this survey.

Features

Massively constructed brick tower mill with wind shaft and box still in position on the cap. A domestic door has been inserted at ground level and is the main entrance to the tower mill and millers house. Timber framed windows. The building itself was inspected from ground level. The fenestration requires maintenance and repainting. Brickwork is in reasonable condition but some repointing is necessary.

Machinery

The historic machinery previously lying discarded in the garden has now been taken into store pending future restoration. This includes the spider controlling the patent sails, triangle (also from sails), stone spindle casting, various driving gears and shafts, hopper, stone nut, etc. Previously there were concerns about management and conservation of the building but this has changed hands in the last six months and has a more sympathetic owner.

Millers House

The millers house appears to be well maintained and in generally good condition. The land is laid to lawns and a very large gravel forecourt with fringing flower beds.

Surroundings

Once situated in open heath land, the structure is situated on a large plot amidst suburban development.

Present Use: Residential

Condition: Fully restored but as part of dwelling

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, Brick	H
Machinery	C18, C19	Iron	H
Fantail	C19	Wood, iron	H

ARCHAEOLOGICAL POTENTIAL

Despite conversion to residential, many original features survive and the machinery still exists, although not in its original place. The archaeological potential is moderate.

SITE SIGNIFICANCE

Highly significant due to group value with the miller's house, and the survival and restoration of many features.

RECOMMENDED ACTION

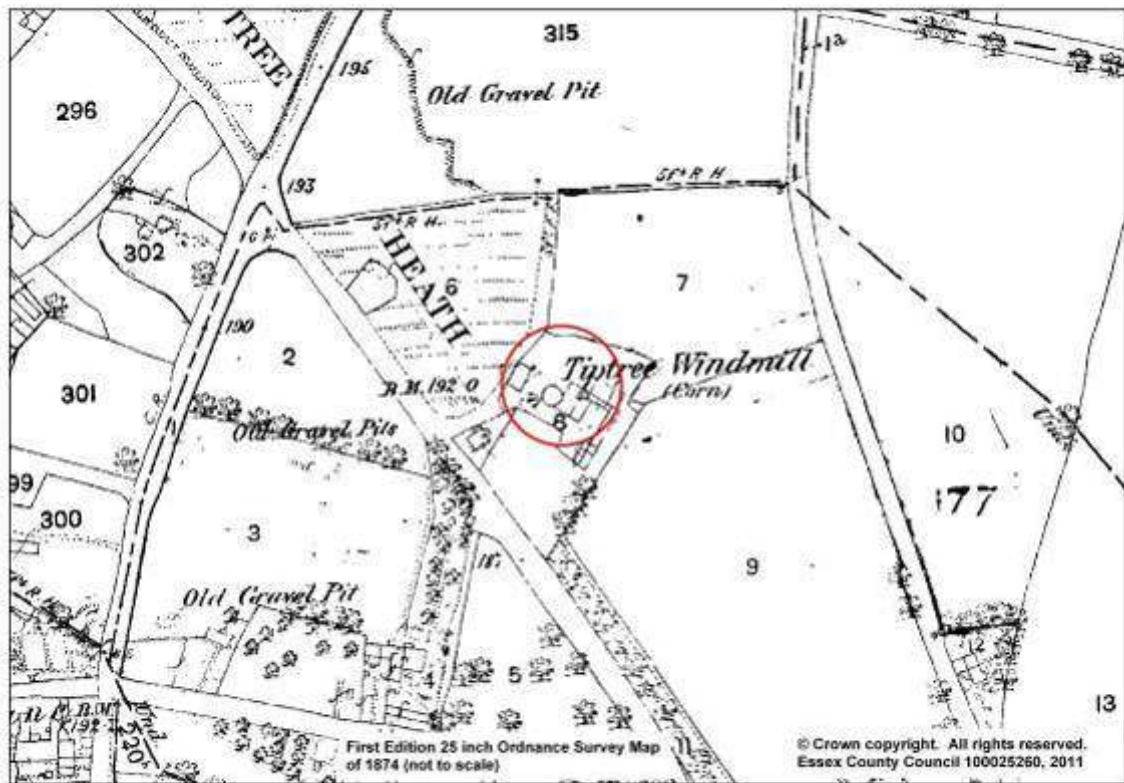
Maintain current listing.

MANAGEMENT Prior to any significant future construction work to the windmill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ***



Photograph of Messing Maypole Tower Mill (Google Maps Street view, retrieved on August 2011)



Epping District

Post mills and Roundhouses

EHER	Name	Grade
33784	Matching Tye Post Mill Roundhouse	**

Smock Mills and Bases

EHER	Name	Grade
45474	High Ongar Smock Mill Base	*

Post mills and Roundhouses

SITE NAME Matching Tye Post Mill Roundhouse

PARISH Matching Tye **DISTRICT** Epping

NGR TL505112 **EHER** 33784

CURRENT STATUS **Con. Area No** **Listed** Grade II **EBAR**

STATUTORY LIST DESCRIPTION

TL	51	SW	MATCHING	HARLOW	ROAD Mill II
----	----	----	----------	--------	--------------------

Matching
3/45
118150

Roundhouse of post mill, C19, converted to smithy c.1882. Walls of soft red bricks with lime mortar, Flemish bond, thickness 0.33 metre to height of 0.80 metre, thickness 0.23 metre to height of 2.50 metres. Octagonal pyramidal roof of handmade red clay tiles terminating in an octagonal louvre. 2 original windows with segmental arches to NE and SW. 2 original doors, of

conventional size to SE with segmental arch over, NW door 1 metre wide, in upper and lower halves, brick arch missing. Forge in centre with bellows intact. The tithe award of 1843 shows the buildings on site as at present, described as

'Windmill, cottage and garden', owner and occupier Charles Martin (Essex Record Office D/CT 236). The 6" OS map surveyed in 1881 describes it as 'Matching Mill (Corn)' but the edition revised in 1895 identifies the roundhouse as 'Smithy'. White's Directory of 1848 describes Charles Martin as 'Farmer (and miller)'.

Kelly's Directories from 1859 to 1878 list George Bennett, corn miller, but by 1882 no miller is recorded. Thus there was still a windmill on the site until 1881, but it was converted to a smithy very shortly afterwards. The roundhouse is not strong enough to support the cross trees of a late post mill, as at Ramsey, Essex, so it was built for storage round the existing sub-structure of a post mill, the walls being thicker at the base to resist the pressure of sacks. The missing arch of the larger door, which never carried any substantial weight, indicates how the main post was brought down without disturbing the walls.

Listing NGR: TL5049411156

KENNETH FARRIES SURVEY

Post mill. Stood 500 yards south east of Housham Hall gate in Matching parish, about $\frac{3}{4}$ mile west of Matching Tye. The mill roundhouse survives. ...Details of the mill have not emerged, save that it was clearly a post mill standing over a circular brick enclosure, which has been preserved, though with substructure removed. This base was once used as a forge....Local enquiries suggest c.1880 as the date of the mill's demolition...Used as a store (1976).

JOHN BOOKERS SURVEY

Not included

Present Use: Used as a garage

Condition: Unknown

ERO SOURCES:

SITE BACKGROUND:

Listed as significant mill remains in Wood 2005. On private property, but can be seen from public roads or footpaths.

Field Survey 2011

24/05/2011

Immediately recognisable as a post mill roundhouse and located within the front garden of an adjoining property. Converted into residential accommodation. Not inspected internally. Brickwork and roof structure appears to be well-maintained and in good condition.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C19	Brick, tile	M

ARCHAEOLOGICAL POTENTIAL

No mound appeared to exist which is consistent with a later construction date in the C19. Due to conversion to residential use, it seems unlikely that significant levels of technology, internal fixtures or fittings will survive within the present structure.

SITE SIGNIFICANCE

The roundhouse is a relatively well preserved, good example of a roundhouse.

RECOMMENDED ACTION

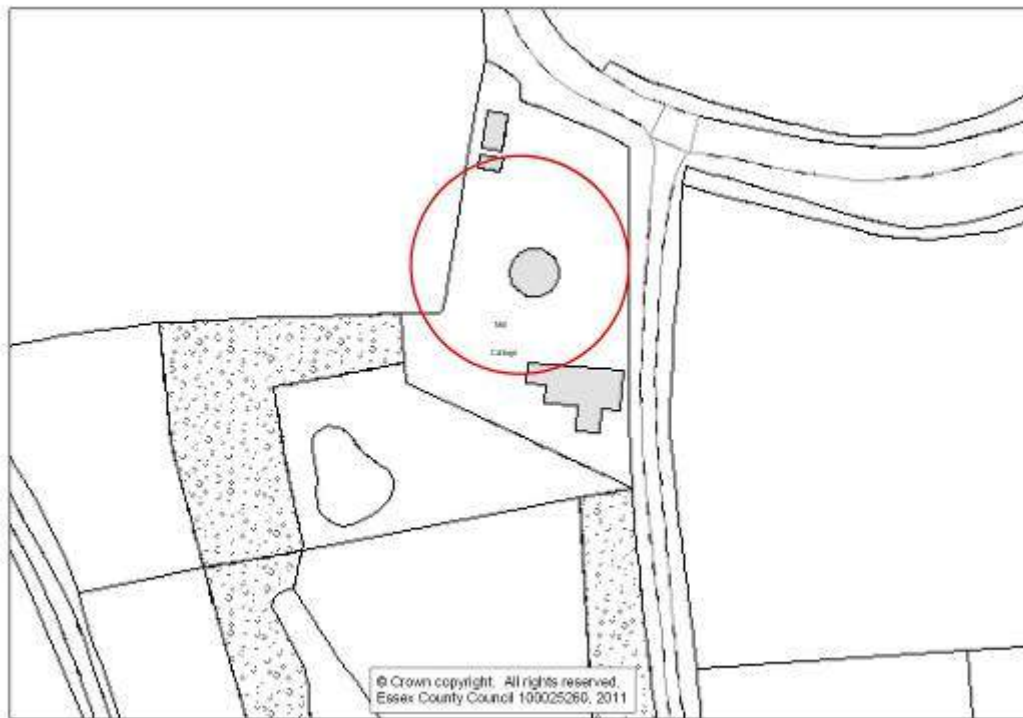
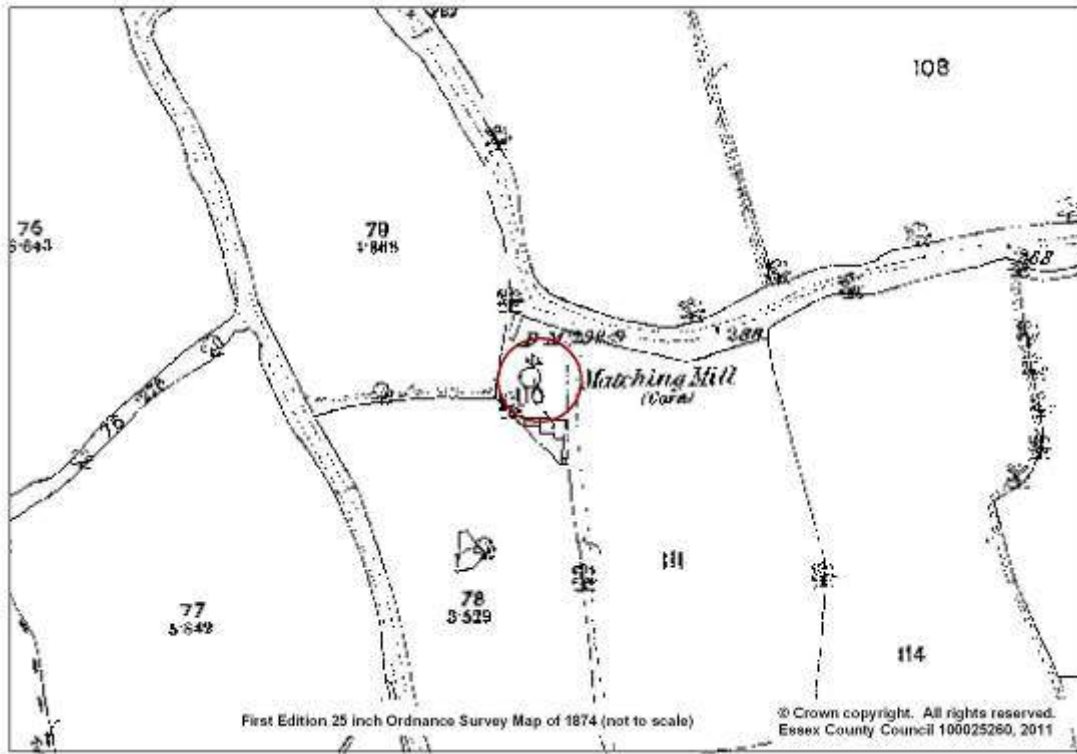
Retain current Grade II listing.

MANAGEMENT Currently in private ownership, occupied and well maintained. Should the opportunity arise an internal inspection of the mill is recommended to assess internal spatial configurations and survival of technologies fixtures and fittings.

GRADING **



Photograph of Matching Tye Post Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



Smock Mills and Bases

SITE NAME High Ongar Smock Mill Base

PARISH High Ongar **DISTRICT** Epping

NGR TL566032 **EHER** 45474

CURRENT STATUS **Con. Area No** **Listed Grade** NL **EBAR** No

STATUTORY LIST DESCRIPTION

KENNETH FARRIES SURVEY

Smock mill, following an earlier mill on the site. Stood immediately north of Mill Lodge on the west side of Mill Lane; the converted base marks the exact site.

This was a sturdy smock mill with a family resemblance to others across the south of the county as disclosed by the only known view of it...which shows a boat-shaped cap, fantail, and four single shuttered anti-clockwise patent sails. There was a deep petticoat as in other Essex smocks, and a tall chimney nearby, presumably for the baking oven, since the millers seem not to have adopted steam power. This mill stood, it would appear, on a much degraded mill mound...

The base survived as a storehouse until 1970, when planning permission was given to convert it into modern rooms for habitation. As then examined it had walls 3 ft. thick at ground level tapering to 19in. under the sills through a height of 9ft. , the interior walls being vertical. The octagon measured 24ft. 6in. across the flats inside. A pair of pine first-floor beams was supported by four oak stanchions 6½in. sq. standing on wooden sole pieces and having folding wedges at the top.

JOHN BOOKERS SURVEY

04/08/1971

Roundhouse of former post windmill, Mill Lane.
Refers to VCH iv 1956; extract as below.

Present Use: Part of house premises

Condition: good, but not original condition

ERO SOURCES:

SITE BACKGROUND:

VCH iv 1956; p.175 'There was a windmill in Mill Lane in 1777. The mill was still working in 1874, but fell out of use soon after. A bakery was run in conjunction with it, which continued after the mill had closed. The base of the old windmill, now an outhouse, stands in the garden of Mill Cottage. It is of unusual octagonal shape and has thick battered walls of red brick. The cross-trees are still in position. The mill may date from the 17th century. Mill Cottage, which included the bakery, is probably of the same period. It has been considerably extended by the present owners.'

Field Survey 2011

24/05/2011

The converted base of the smock mill still exists in the much the same condition as when converted into residential accommodation in 1970. It is barely recognisable as the base of a windmill other than its unusual octagonal shape and the heavy timber hurst frame that survives within the property as described by Kenneth Farries, but not of course cross-trees as VCH observed. Rendered elevations, painted white. Hipped roof with single dormer oddly placed above the front door and providing light for the bedroom on the first floor. Not an attractive property and recognisable as a smock mill base purely from its location and obvious provenance.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill base	C19	Wood, brick	M

ARCHAEOLOGICAL POTENTIAL

Given that the mill has almost been completely demolished, the archaeological potential is low.

SITE SIGNIFICANCE

Very low significance due to conversion.

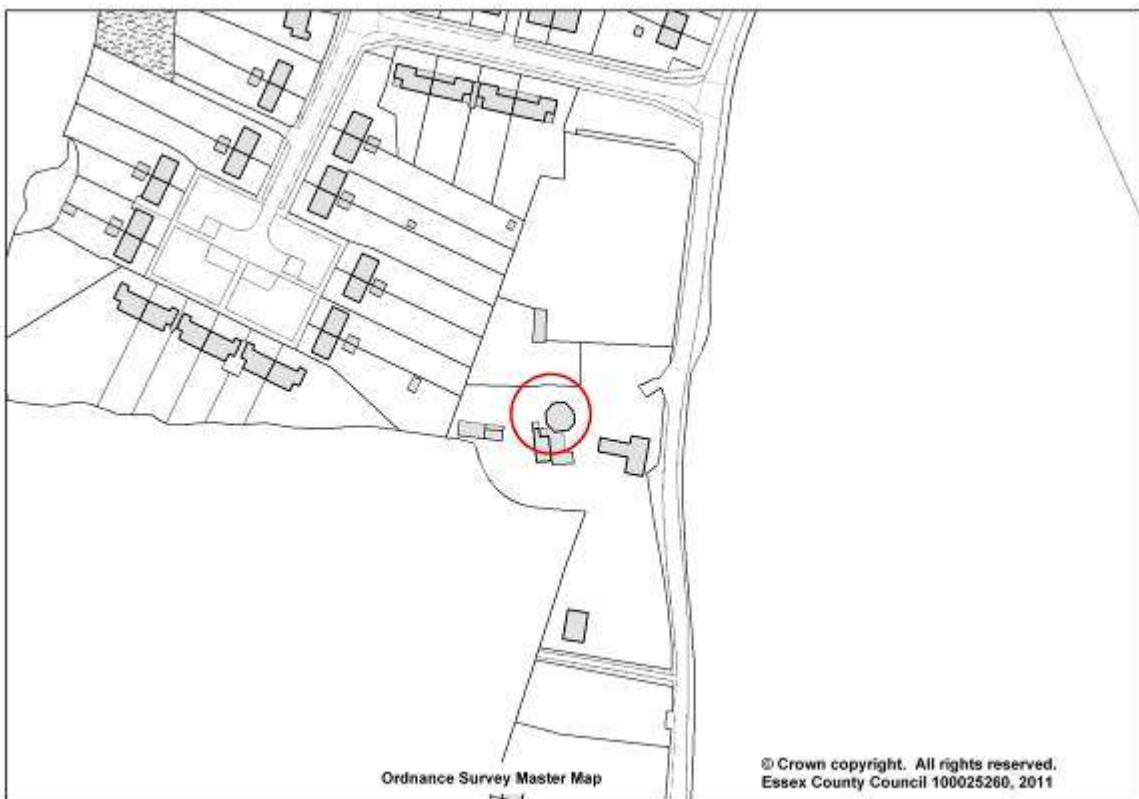
RECOMMENDED ACTION None.

MANAGEMENT Given that the smock mill base has been incorporated into a new property, no management suggestions would be necessary.

GRADING *



Photograph of High Ongar Smock Mill Base (Google Maps Street view, retrieved on August 2011)



Rochford District

Tower Mill

EHER	Name	Grade
26377	Rayleigh	***

Tower Mill

SITE NAME Rayleigh Tower Mill

PARISH Rayleigh

DISTRICT Rochford

NGR TL 806910

EHER 26377

CURRENT STATUS Con. Area Yes

Listed Grade II

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

RAYLEIGH BELLINGHAM LANE

TQ 8090-8190

7/101 Rayleigh Windmill

27.8.57 (formerly listed as The
- II Old Windmill)

Tower windmill. Early C19. Red brick. 6 storeys. Fully restored externally 1970's, with sails, cap and fantail. The 2 lower storeys vertical, upper storeys tapering inward. Various 2 light windows with segmental heads. C20 double doors with segmental head over. Second storey double doors. No internal inspection at time of re-survey. Batsford Guide to Industrial Archaeology of East Anglia. John Booker.

Listing NGR: TQ8064190941

KENNETH FARRIES SURVEY

Tower mill, standing today, preserved, just south of the crest of London Hill, near the parish church. Thomas Hill, timber merchant, bought a plot on Castle Farm in June 1809, on which he erected the tower mill. The exterior brickwork carries the inscription J HARVEY 1809. ..There were probably never more than three brick tower mills in Essex south of Chelmsford, and each was highly individual in character...For some 20 ft. from ground level the walls are circular, 20 ft. in diameter internally, and 4ft 6in. thick at the base...the height from the ground to the cap ridge would have been about 60 ft...A stage would have encompassed the top of the vertical base, from which the last working sails – two common and two spring – were set by hand...in 1972...An extensive and imaginative plan to capitalise the combined potential of the mill, precinct and panorama to the west was agreed, and in pursuance of this the Rayleigh and District Antiquarian and Natural History Society formally opened the mill for exhibition purposes on 16th May, 1970.

**JOHN
08/02/1972**

BOOKERS

SURVEY

A well-known landmark but long since disassociated with milling and it has no cap, sails or gallery for many years. The top has been castellated. There are six stories and the tower begins to taper above the bottom two. There is no machinery of interest and the building is little more than a distorted shell hardly worth, in its present state, of its own contribution to the landscape.

Present Use: Used to some extent by local societies, store.

Condition: Fair. There are hopes of restoration

ERO SOURCES:

SITE BACKGROUND:

Rayleigh Mill was built in 1809 and is the tallest remaining mill in the county. Its cap, an impressive 18 metres (60 feet) from ground level, shares the skyline with the church, towering above the mound of Raleigh Castle. When wind-powered, the mill had three pairs of stones driven by two spring sails and two cloth-covered commons. Milling by wind seems to have stopped by the mills centenary, being replaced by an oil engine, then in 1937 by electricity. In 1974, a replacement cap and non-working sails were fitted by Rayleigh Town Council. More recently a stage by the County Millwright has been added by Rochford District Council. Though lacking machinery, its appearance now is very similar to that of its working days.

Field Survey 2011

28/02/2011

Although presenting the appearance of a working mill, the building has been fully converted into museum accommodation on all floors, with gallery space and meeting rooms. It is probably the only centrally heated sailed windmill in Essex. No original machinery exists below the dust floor and as the cap is a 1974 replacement, none is likely to remain.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick	M
Sails	C20 replacements	Wood, steel	L
Cap	C20 replacement	Wood	L

ARCHAEOLOGICAL POTENTIAL

Very few internal features exist, and no machinery survives.

SITE SIGNIFICANCE

Low, considering that it has been converted and very few original features survive.

RECOMMENDED ACTION Maintain current listing.

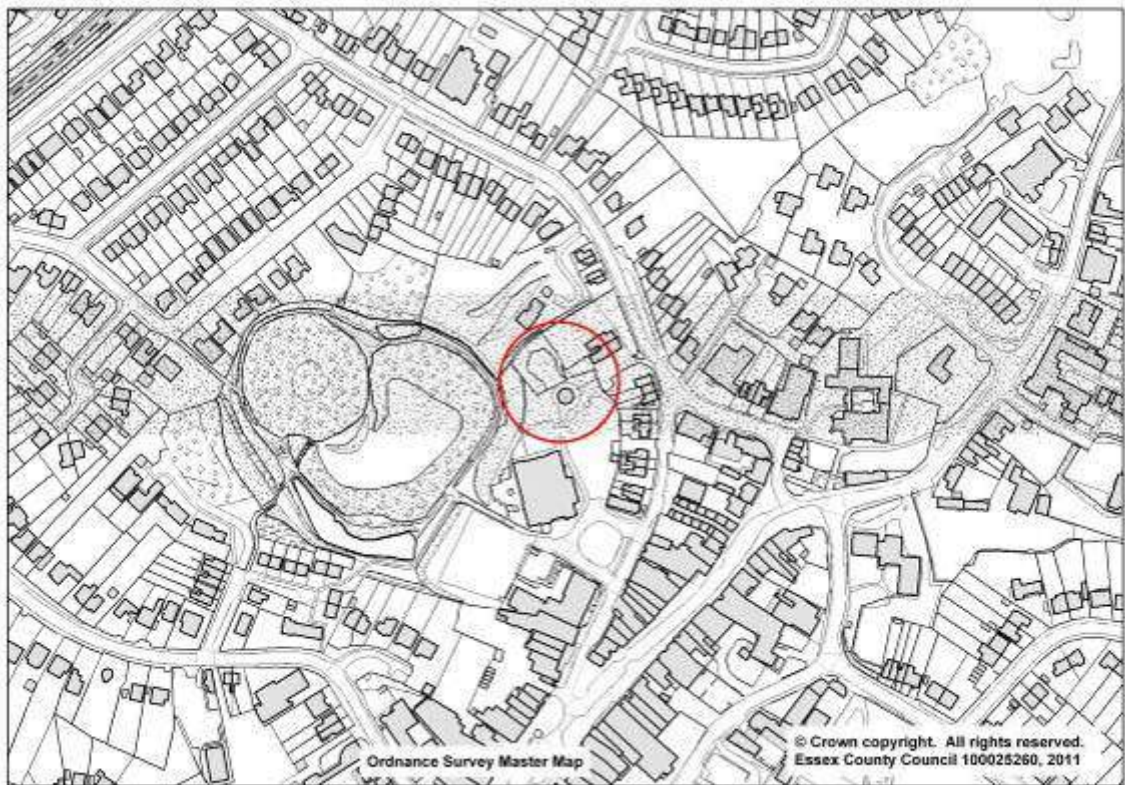
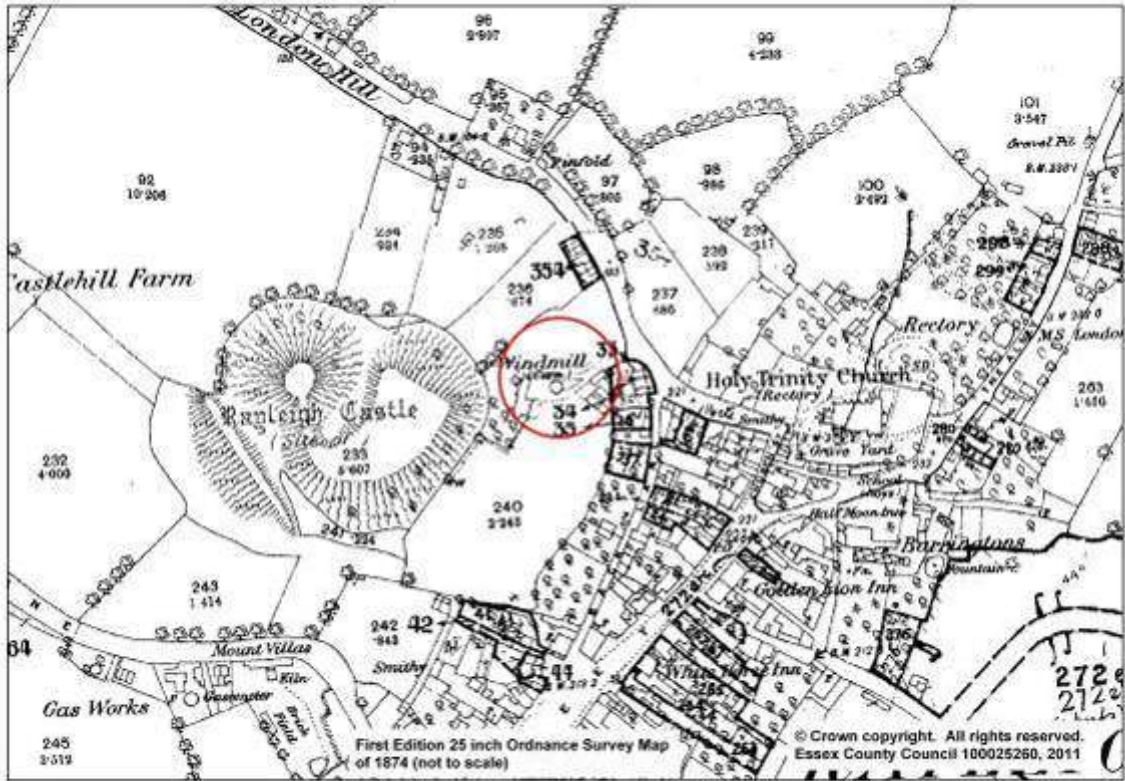
MANAGEMENT

Prior to any significant future construction work to the windmill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building may also form part of any future consent.

GRADING ***



Photograph of Rayleigh Tower Mill (Google Maps Street view, retrieved on August 2011)



Tendring District

Post mills and Roundhouses

EHER	Name	Grade
3391	Ramsey Post Mill	****
3038	Thorpe-le-Soken Post Mill Roundhouse	*

Smock Mills and Bases

2853	Great Holland Smock Mill Base	**
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Post mills and Roundhouses

SITE NAME Ramsey Post Mill

PARISH Ramsey

DISTRICT Tendring

NGR TL 806910

EHER 3391

CURRENT STATUS **Con. Area** Yes **Listed** Grade II* **EBAR** YES

STATUTORY LIST DESCRIPTION

23/06/1952

RAMSEY AND PARKESTON
(north-west side)

THE STREET TM 23 SW

2/68

Ramsey Windmill 29.4.52 31.10.86

GV

II*

Post mill. 1842. Roundhouse of red brick in Flemish bond, buck timber framed and weatherboarded, with fabric roofs. Roundhouse of 2 storeys, buck of 3 storeys. The roundhouse has one C20 casement on each floor to SW and NE, and one plain boarded door on each floor to SE. The buck is fixed with the sails to NW; it has one sash of 16 lights on each side of the meal floor and stone floor, one small casement in the tail gable, and a plain boarded door in the tail. The post and trestle are carried by the exceptionally high roundhouse, which has a slight batter. The sails are of double-shuttered patent type, now without shutters, forming the original working set; they were struck by a chain on a purchase wheel set in the tail wall of the buck. The mill was winded by a six-vaned fan mounted above the roof, driving via shafts and gears to a worm-wheel mounted on the quaker-bars below the body, the iron wheels running on a stone track; the fan is missing, but the remainder of the drive is present, and is unique in Britain. The buck is lightly built, partly of pine, with oak being reserved for the main timbers. There are 3 pairs of stones, 2 pairs over-driven in the head, one under-driven in the tail, offset to the left. Most of the machinery is of cast iron, except the brake-wheel which is of wooden clasp-arm type with 2 cog-rings. The inner ring was for driving the dressing machinery, now missing. There is also an interesting drive for a former jog-scry. The mill is believed to have been moved from Woodbridge, Suffolk, in 1842 by Henry Collins. Robert Brooks was the first owner, and the mill remained in the hands of the Brooks family for most of its working life. In 1937 it was sold to R.M. Scott of Ipswich, and it last worked in 1939. By 1974 it was derelict, with all the main timbers broken, on the verge of collapse. Repairs were effected by volunteers from the Suffolk Mills Group and the owner, Michael Organ. No attempt was made to correct deflections and distortions, but an ingenious system of steel girders, tie rods and brackets was inserted to prevent further movement. Much timberwork was replaced, and all the cladding. (K.F. Farries, *Essex Windmills, Millers and Millwrights*, IV, 1985).

Listing NGR: TM2093730372

Sources

Windmill gazetteer for England, A A Bryan

Selected Sources

Book Reference - *Author:* KG Farries - *Title:* Essex Windmills Millers and Millwrights
- *Date:* 1982 – *Volume 2* 1985 - *Volume:* 4

KENNETH FARRIES SURVEY

Post mill. Preserved. Stands behind 'The Windmill House' on the north side of the old

Colchester road 350 yards west of the junction with the road to Manningtree. The surviving post mill was stated to have been moved in 1842 from the neighbourhood of Woodbridge, Suffolk, by Henry Collins, millwright, of that locality, and to have been erected at Ramsey for Robert Brooks. A brick in the roundhouse has this date cut into it and was laid upside down. The mill was built in the Suffolk style at the zenith of its development. There are three floors in the roundhouse and two pairs of stones in the head and a small tail pair, probably additional to the original provision, or a replacement, since their fittings, unlike those of the head pairs, appear to be of Whitmore design. The mill was scheduled by Essex County Council in 1937 to prevent its demolition. ..Ramsey, a Suffolk-built mill...incorporating features corresponding to the highest summit of development attained by post mills, no matter where, had from the start a three-floored roundhouse in which the piers and walls were blended and bonded into a continuous flow of convex and concave faces...Most exceptionally, a six-bladed fantail was mounted over the rear of the mill roof...

JOHN BOOKERS SURVEY

22/04/1971

An interesting and unusual mill which is now in bad repair. It is the tallest postmill in Essex and was the highest roundhouse, containing three floors. Most Essex windmills of this type were turned by tail poles but Ramsey was a fantail, although it is now the worse for wear. There is a fair amount of iron in use in the building, for instance the wallower is iron and there are ribbed cast iron bridge-trees, For the machinery in detail, see Wailes 1958.

Present Use: Disused

Condition: Dilapidated

ERO SOURCES:

SITE BACKGROUND:

The most easterly mill in Essex and an important landscape feature, Ramsey Mill is of the Suffolk type with a three-storey roundhouse and a small body. It had an unusual roof-mounted fantail. It is said that the mill was moved to this site by the millwrights Whitmore & Binyon in 1842. This tall and imposing mill was saved from collapse and partly restored in the late 1970's by millwright Chris Hullcoop working with the former owner Michael Organ.

Field Survey 2011

24/05/2011

Unfortunately this post-mill is situated in an exposed location near to the sea and requires very frequent maintenance. The condition of this important mill gives grounds for concern. Extensive deterioration of exposed external timberwork is clearly evident. Paintwork has weathered from most parts of the structure which is now unprotected. The brickwork of the roundhouse requires repointing and a thorough building inspection should be carried out prior to undertaking an urgent programme of repairs and maintenance work. The mill is now inaccessible and notices have been posted at the entrance to the roundhouse and at the bottom of the now decrepit rear ladder warning of the dangerous state of the building. The two sets of patent sails and the spider are still in position but hemlaths are missing to one of the sails. They have entirely lost their paintwork and green mould is present suggesting fairly extensive wet rot. Two French Burr millstones have been propped against the building at ground level and these are also weathering badly with loss of Plaster of Paris matrix. The mill is now clearly in a fixed position and cannot be turned for greasing and regular maintenance. This in itself gives ground for concern as to whether the post mill can survive. There was no sign of the fantail that was once located to the rear of the buck roof, neither does it appear in photographs taken in 2005.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post mill	C19	Wood, Brick	H
Roundhouse	C19	base Wood, tile	H

Sails	C19	Wood, iron	H
Machinery	C19	Iron	H

ARCHAEOLOGICAL POTENTIAL

This is a good example of a well preserved windmill, but suffers from some deterioration. It is not known whether this site carried earlier mills.

SITE SIGNIFICANCE Ramsey Windmill is a good example of a tall post mill with a fan tail, and brings important historic character to the area.

RECOMMENDED ACTION

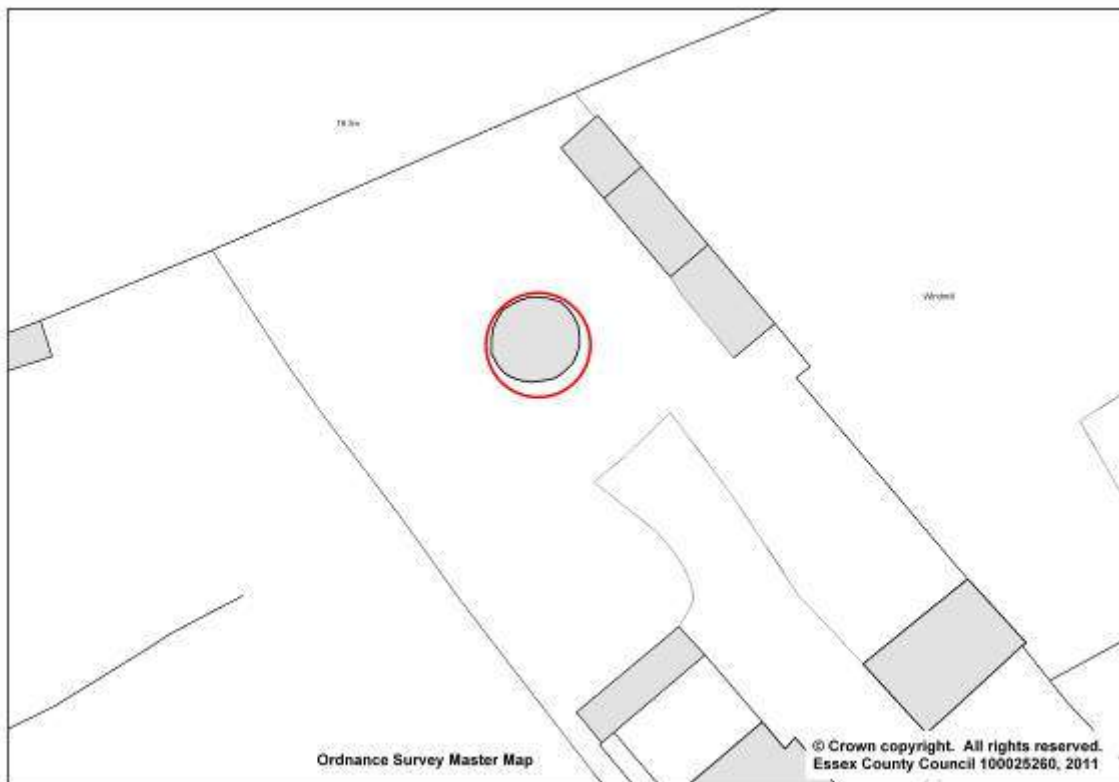
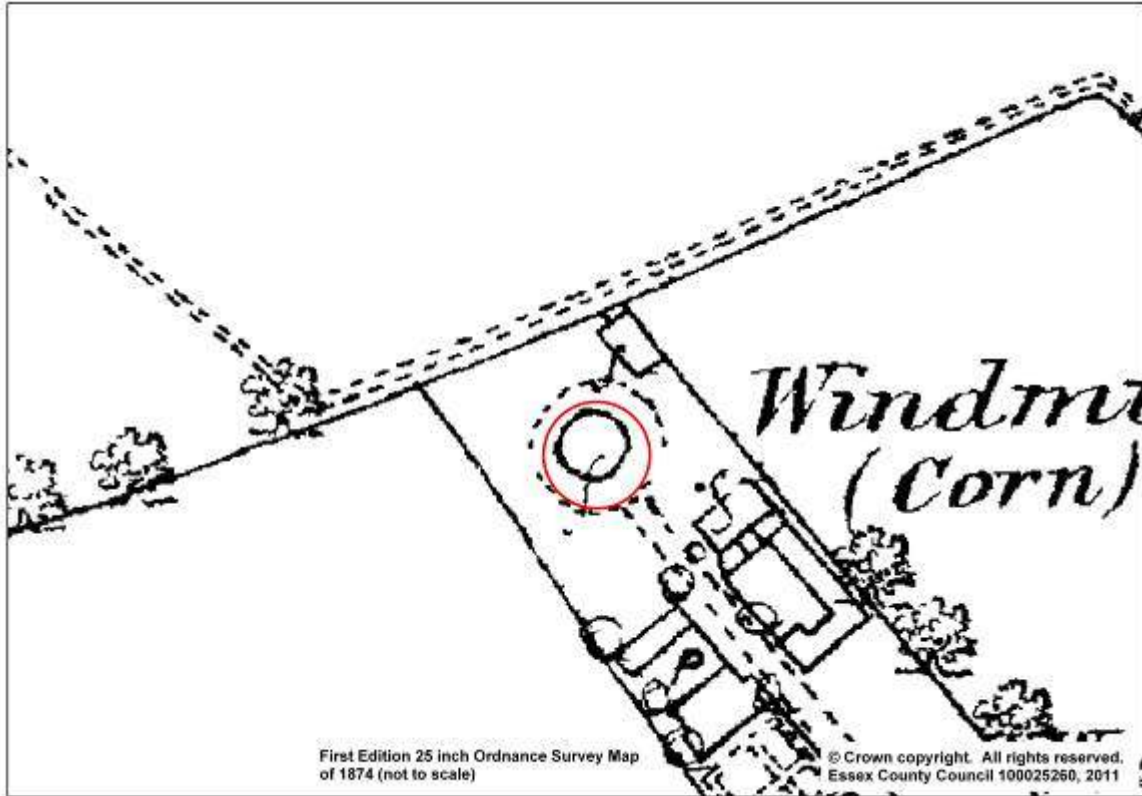
Recommend that current Grade II* listing is maintained. An urgent programme of preventative maintenance and structural repair should be considered, through the appropriate bodies such as English Heritage and Tendring District Council and in consultation with the owner. The windmill has been added to the Heritage at Risk Register.

MANAGEMENT A historic building survey at RCHME level 3 or 4 is recommended should the mill or millhouse become threatened by significant alteration or demolition.

GRADING ****



Photograph of Ramsey Post Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Thorpe-le-Soken Post Mill Roundhouse

PARISH Thorpe-le-Soken **DISTRICT** Tendring

NGR TM178223 **EHER** 3038

CURRENT STATUS **Con. Area** Yes **Listed** No **EBAR** No

STATUTORY LIST DESCRIPTION

This building is not listed

FARRIES SURVEY (Extracts)

Thorpe-le-Soken (2) A pair of post mills. The surviving base of the westerly mill stands 280 yards south of the village centre off Mill Lane. The other mill stood 120 yards to the south east, in a field. TM 178223 and 179223 (*NB: This location is not accurate*).

Milling by wind at this site dates from before 1700. Ogilby and Morgan (1678) indicate a windmill south of the village, and Warburton, Bland and Smyth 9c.17240 and Chapman & Andre (1777) mark one mill: Greenwood (1825) and the tithe map (1842) show two. ..The original mill was referred to as old and well-accustomed in February, 1786, and in excellent repair, having been 'lately rebuilt near the street'. The village mill was worked by George pattrick, miller and baker, in the 1840's, in conjunction with the second post mill on 'Further Mill Pightle' to the east. In October, 1847, the unnamed owner offered the extensive property for auction at the Bell Inn, Thorpe. The two post mills, with brick-buily roundhouse, driving four pairs of stones, the mill house containing 'six lofty bed-rooms', and the large bake-office, were then before the public...from 1855 to 1878 Robert beck with operated Thorpe Mills, but only one is subsequently mentioned, worked by R.Gilders from 1882-9; however the first O.S. 6in. map (surveyed 1874) does not include the east mill. Philip Bendall Harris took over in 1889. By that time a third pair of burr stones had been set up for wind drive and a fourth pair and an oat crusher were worked by steam in the roundhouse.....In 1900 the unacceptable state of the centre post and difficulty of replacement brought to an end milling by wind, and the body was taken down in 1906....Photographs show two pairs of double-shuttered patents turning anticlockwise and struck from the rear exterior, where a y-wheel was mounted above the tail platform. The mill was automatically winded by a bladed fantail over the rear steps. The body was evidently raised in height during the century or more of its existence, and the roundhouse contained two floors with large bins and a storage room, doubtless a vermin-proof 'pastry'. Mrs Emily J. Harris, using steam power, is returned by directories as miller for most of the inter-war years. In 1945 the mill roundhouse was sold to Mr Hudgell, still in residence in his converted dwelling in 1973.

JOHN BOOKERS SURVEY

30/10/1969

Roundhouse of former post mill, Mill Lane.

The roundhouse remains at the end of Mill Lane and has been converted to a dwelling with the name 'Old Mill' on the projecting porch, which is under the former hatch entrance. An extension has been added to the rear and there is now a chimney on top of the roundhouse. The windmill itself was not standing in 1932.

Present Use: Residential

Condition: Working order

ERO SOURCES:

SITE BACKGROUND:

Field Survey 2011

28/05/2011

See aerial photograph. The property has been converted into a private house. A French Burr millstone has been set into the floor of the property.

The associated Mill Farmhouse is listed Grade II, (EHER 34417).

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C19	Brick, tile	M

ARCHAEOLOGICAL POTENTIAL

Given the levels of alteration, survival of significant technology, fixtures and fittings is thought unlikely.

SITE SIGNIFICANCE Conversion to residential has had a significant impact on the significance of the site, however the external condition appears to be quite well preserved. Has group value in association with the listed buildings.

RECOMMENDED ACTION

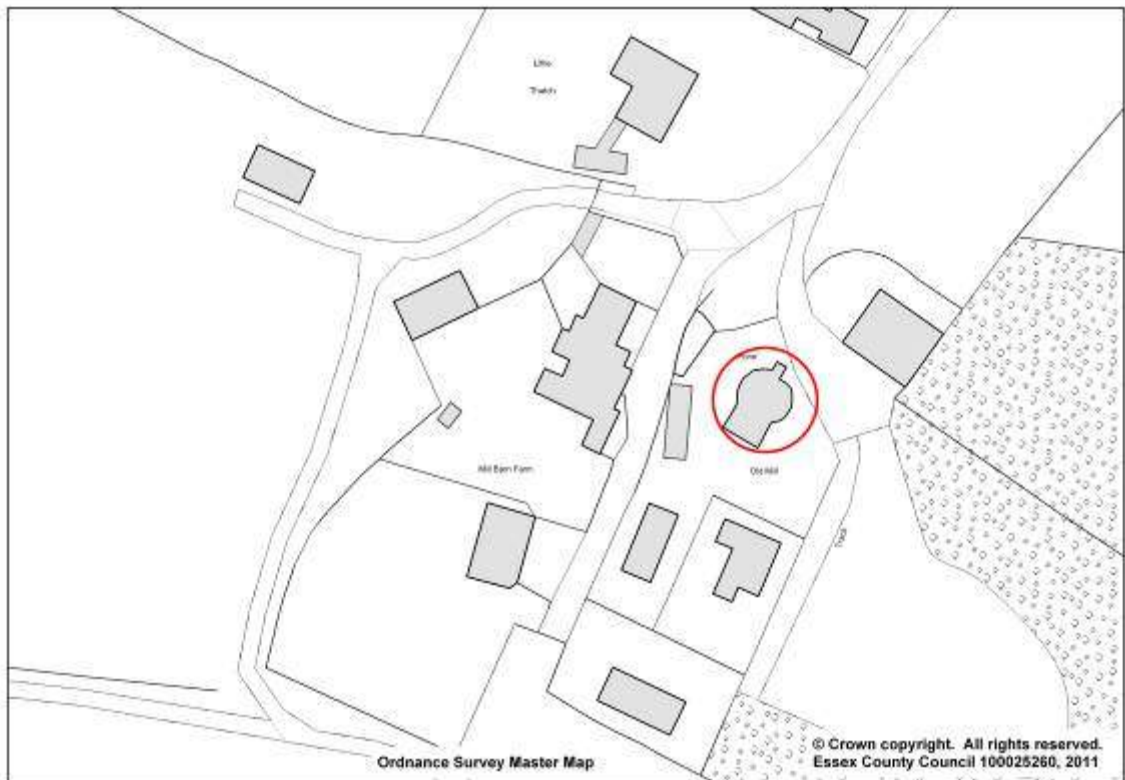
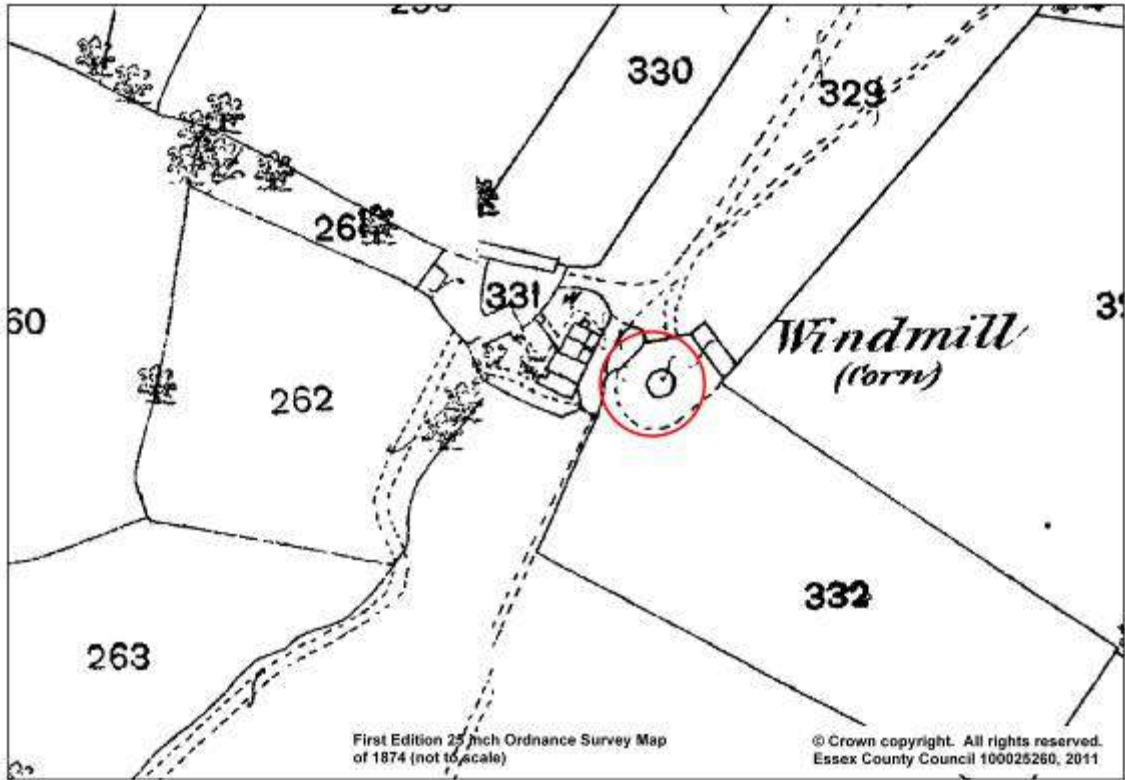
The site may be considered for inclusion on a local list.

MANAGEMENT Presently in use as a private residence and are accordingly maintained. Should the opportunity present itself an internal inspection should be made.

GRADING *



Photograph of Thorpe-le-Soken Post Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



Smock Mills and Bases

SITE NAME Great Holland Smock Mill Base

PARISH Great Holland

DISTRICT Tendring

NGR TM204194

EHER 2853

CURRENT STATUS Con. Area No **Listed** Curtilage Listed **EBAR** No

STATUTORY LIST DESCRIPTION

FRINTON AND WALTON LITTLE CLACTON ROAD
TM 21 NW
GREAT HOLLAND
8/52 Great Holland Mill
House
GV II

Mill House now used as an office for the mill. Early/mid C19. Red brick. Red plain tiled gambrel roof. Right and left red brick chimney stacks. One storey and attics with 2 square headed dormers. Small paned vertically sliding sashes with glazed margins, ground floor left with side lights. Central C20 door, moulded surround, flat canopy over. 3 later ranges are attached to rear left, that to far left a former granary with vertically boarded door to gable end, the central single storey range with a vertically boarded door and small paned casement, and 3 small paned windows with segmental arches to right range. The latter ranges with grey slate roofs. Forward left of the main range is a single storey porch with hipped grey slate roof, casement with glazing bars. C20 door to left return.

Listing NGR: TM2039019315

KENNETH FARRIES SURVEY

The farmer-diarist Charles Hicks, of Great Holland, recorded the erection of the smock mill, which started work in March 1840... the flour-bladed double-shuttered anti-clockwise patent sails and the 6-bladed fantail were taken down c1923; enquiries by R.Hawksley show 1952 to be the year when the elegantly proportioned white-painted smock frame was truncated and roofed over at just above mid stone-floor level. Two complete timbered floors and the brick base therefore remain, and a cement facing protects the stump up to roof level on the south-west flank. Altogether there were six floors, and the four pairs of stones, three of 4ft. and one of 4ft. 2in. diameter, were underdriven on the fourth floor reckoned from ground level. It was a 'modern' mill, having wind and upright shafts, brake wheel, wallower and great spur, also the stone nuts, cast in iron, though the bridgetrees were wooden. As at Tendring, there were flanking buildings, mentioned by Bryant, accessible from within the mill, and still in use... At Great Holland there are two features of particular interest in the surviving lower frame; the sawn down cant posts and the mode of support for the former four pairs of stones and machinery. The cant posts, like all other main timbers now seen are of pine; they have been halved in the radial sense and bolted together without intermediate packing. At their feet are bolted heavy cast-iron webbed brackets, suitably angled to rest upon the sills and against the inclined sides of the posts, which have one bracket on each side. The posts vary in section, but approximate to 11in. square. The transoms and intermediate verticals are slender for their length, being 6 in. square. The brick base on which this frame rests measures 21ft. across the flats internally (23ft. 6in. inside the weatherboarding at sill level), and the height of the present structure is about 34ft., or approximately half that formerly attained by the ball finial.

JOHN BOOKERS SURVEY**30/10/1969**

Base of former smock windmill. Holland Mill Ltd., millers and corn merchants
 Brick base only of former octagonal smock mill. In 1932 it was 'still a prominent landmark' with five stories and domed cap. Apparently it was still working then as it was fitted with three pairs of stones driven by an oil engine which had replaced an earlier steam engine in 1928; the sails, however, had been removed. In 1955 the mill was described as a 'stump' by wailes, who puts the date at c.1847. If this date is right, this was one of the later smock mills in Essex, but there were mills on the site earlier than this.

Present Use: Domestic**Condition:** Fair**ERO SOURCES:**

None identified other than Farries Collection.

SITE BACKGROUND:

The mill appears to have been built on a new site in 1840, as was the case with most later smock and tower mills.

Field Survey 2011**28/02/2011**

Well preserved former smock mill body extending to half its original height of 68ft. to the ball finial and incorporating three original floors. Appears to be in generally good condition but it was not possible to carry out an internal inspection to see the state of preservation of the timber superstructure.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill base	C19	Brick, wood	M

ARCHAEOLOGICAL POTENTIAL

Interesting structure but most of the original fixtures have been removed, group value with the associated listed building.

SITE SIGNIFICANCE

Although only partially surviving, this one of only three timber smock mill superstructures now remaining in existence in the county.

RECOMMENDED ACTION

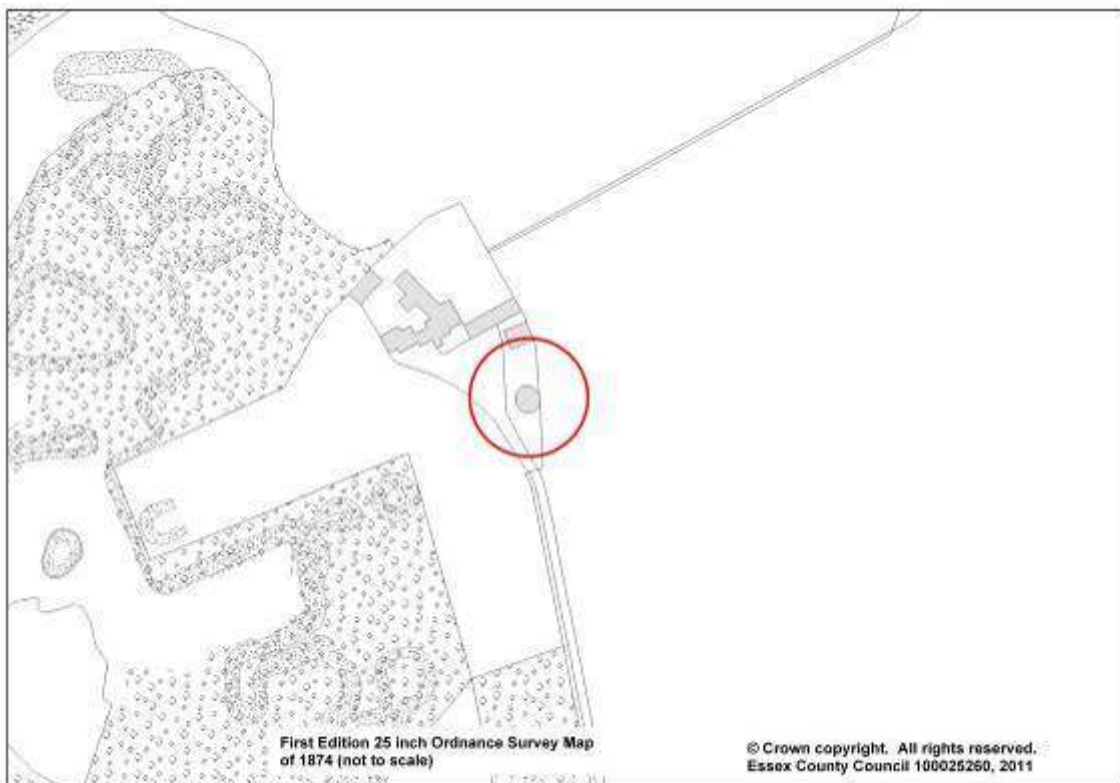
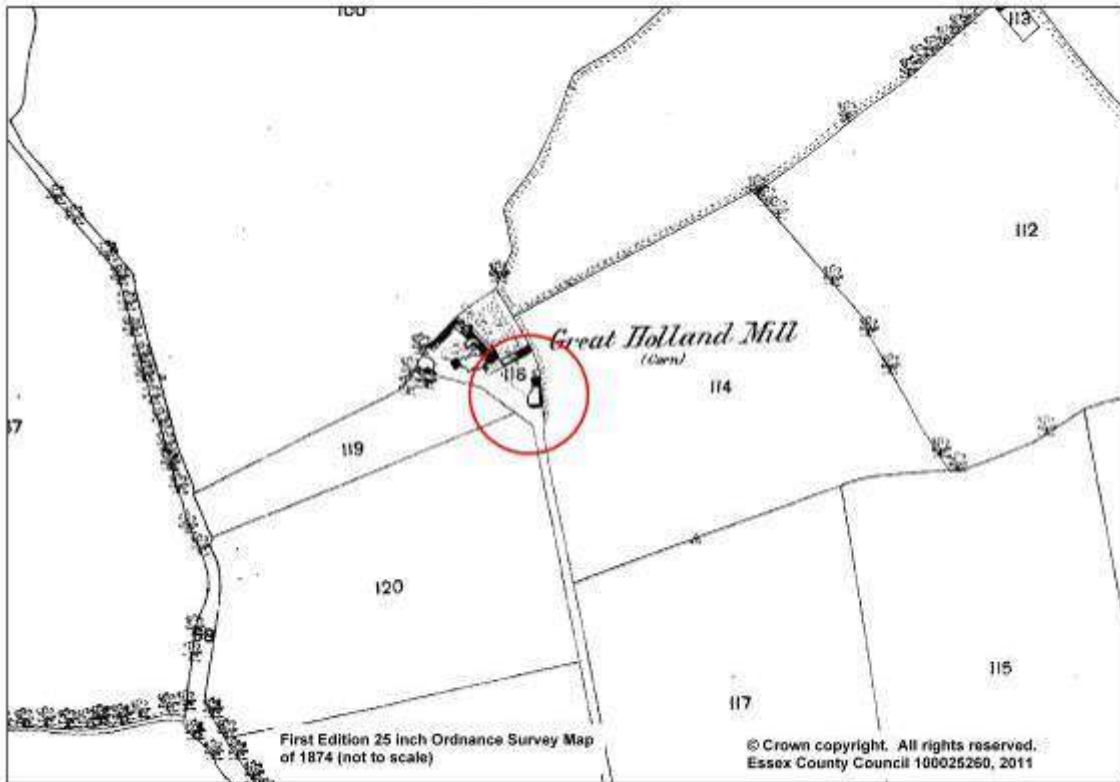
Carry out internal inspection of the smock base and recommended for local listing.

MANAGEMENT Presently in fair condition. A detailed historic building survey at RCHME level 3 should be recommended if the mill and/or associated buildings are threatened by major works or demolition.

GRADING **



Photograph of Great Holland Smock Mill Base (Google Maps Street view, retrieved on August 2011)



Thurrock District

Post mills and Roundhouses

EHER	Name	Grade
1883	Horndon-on-the-Hill Post Mill Roundhouse	**
47636	Orsett Post Mill Roundhouse	*

Smock Mills and Bases

5275	South Ockenden Smock Mill	0
35154	Baker Street Mills	***

Post mills and Roundhouses

SITE NAME Horndon-on-the-Hill Post Mill Roundhouse

PARISH Horndon-on-the-Hill **DISTRICT** Thurrock

NGR TQ668833 **EHER** 1883

CURRENT STATUS **Con. Area No** **Listed Grade** NL **EBAR**

STATUTORY LIST DESCRIPTION

KENNETH FARRIES SURVEY

Post mill. Stood 50 yards west north west of the church. Base remnants in situ 1984. The mill body was taken down in 1917, leaving the roundhouse to be converted into a work room. This is turn fell into disrepair, and in 1972, when the property lay empty, the exposed brick piers and crosstrees were festooned with ivy, rambler roses and clematis...The mill plot had been redeveloped for housing by April 1977, leaving the mill remains undisturbed.

JOHN

BOOKERS

SURVEY

30/10/1969

Remains of base of former post windmill. Very little remains. For many years the roundhouse only was standing but this was dismantled (or had collapsed) by 1955 and the site is now overgrown and what little is there is rapidly decaying. It is still, however, possible to trace, and to some extent to see, the basic sub-structure of a post mill – notably the brick piers and cross-trees, which are usually masked by the roundhouse.

Present Use: Low mound remains in garden of a housing estate.

Condition:

ERO SOURCES:

SITE BACKGROUND:

Cartographic evidence indicates the mill was early 19th century in date. In late 1974-1975 much of the mound was removed, but no trace of an earlier mill was found. Photos show this structure was capped by a conical roof, "of a very similar construction to the well-known round house in Mill Lane, Orsett". Whole mill is similar to that at Aveley, from the photos.

Field

Survey

2011

28/02/2011

Now within a modern housing development. Forms a circular low walled enclosed flower bed. It is possible to identify as the remains of the post-house windmill. It is well hidden from Mill Lane by a garden hedge and other bushes. Part of the cross trees are visible.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse remains	C19	Brick	L
Trestle remains	C19	Wood	H

ARCHAEOLOGICAL POTENTIAL

Cross-trees are visible, which is very rare. The site has previously been excavated and no

evidence was found to suggest an earlier mill on the site before the C19 windmill. The mound has been removed, but low walls of the round house remains.

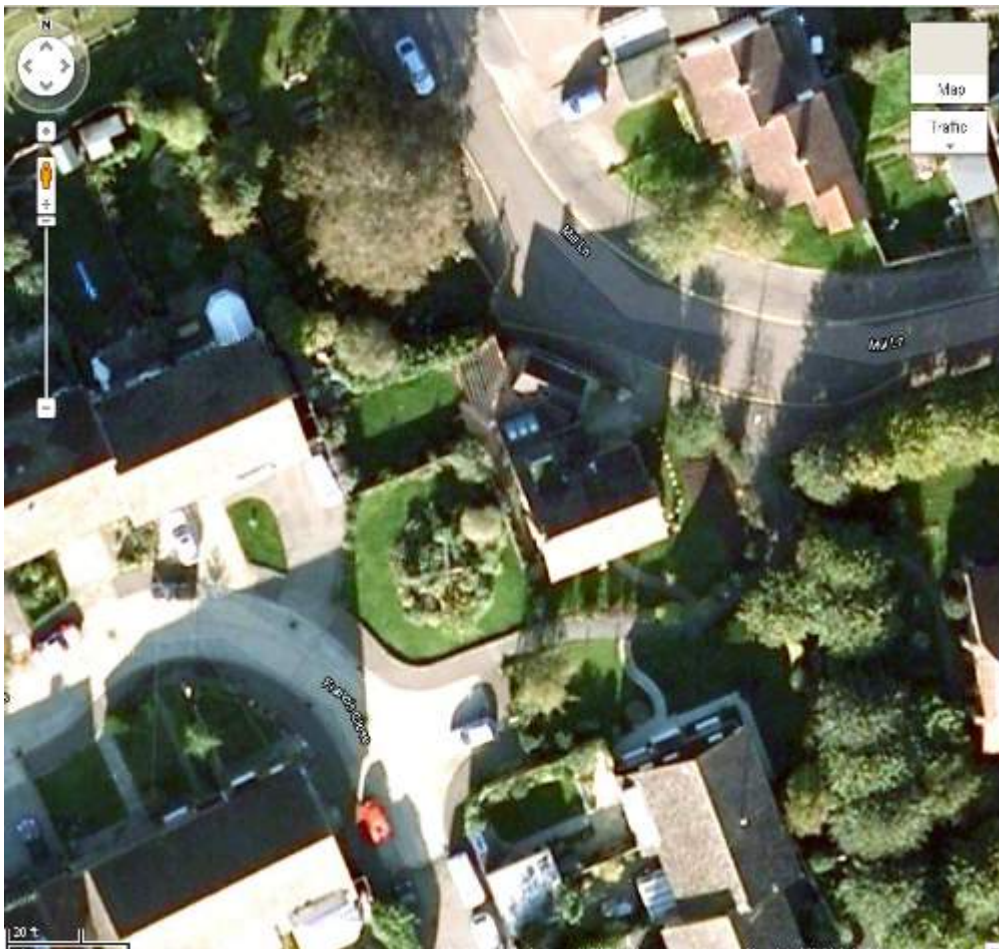
SITE SIGNIFICANCE

Although the mill has been dismantled and only the base of the roundhouse remains, this is the only survival of any windmill in Essex where the cross-trees are still visible. For that reason the site is very interesting.

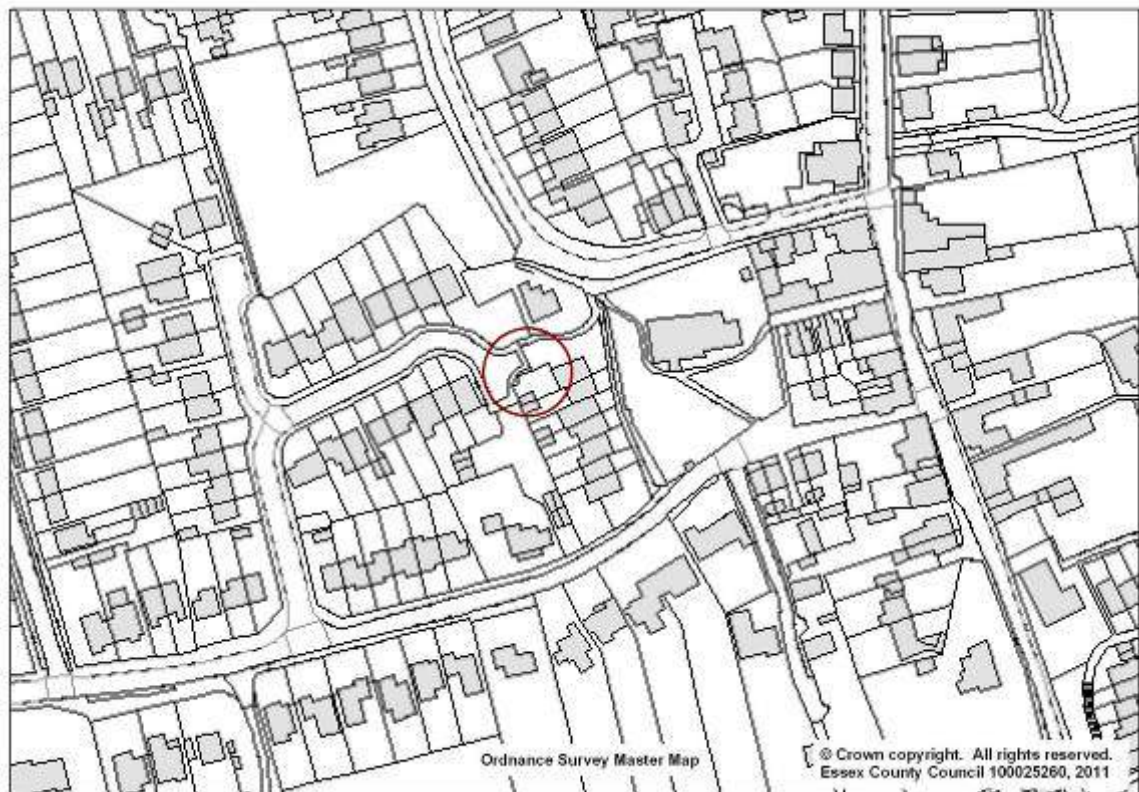
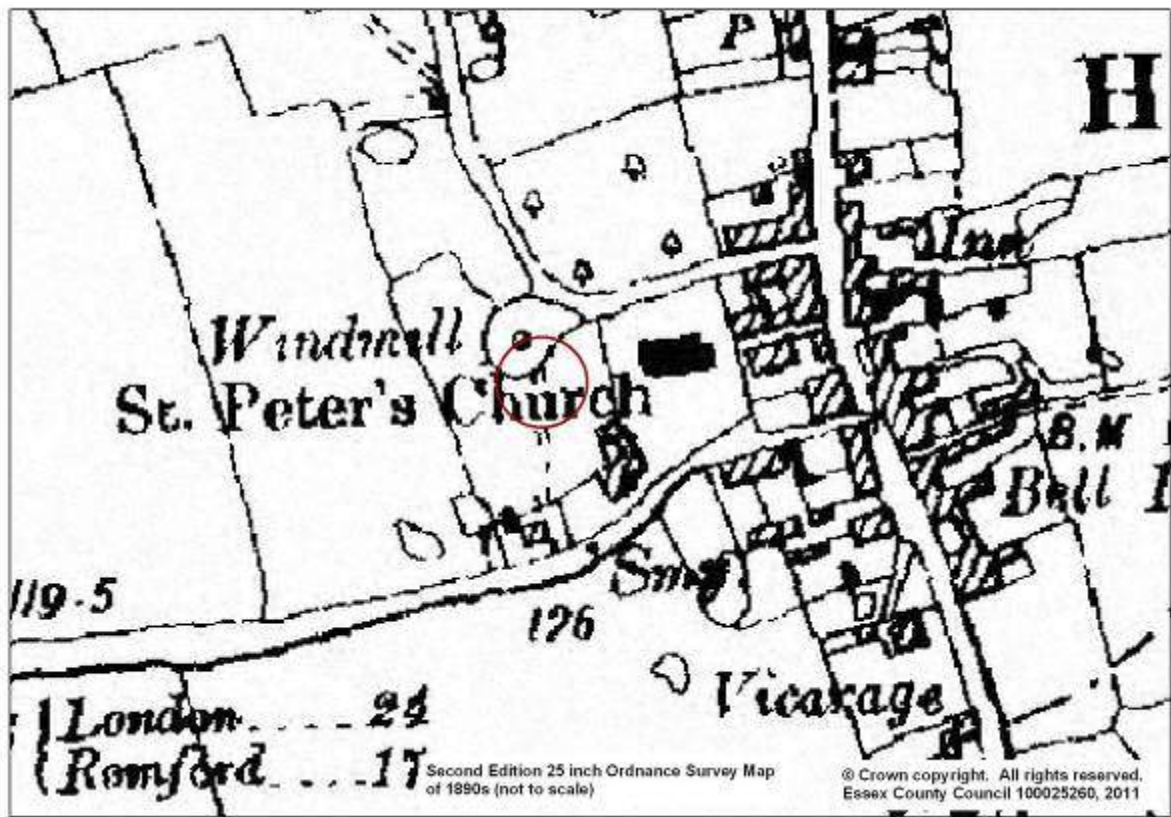
RECOMMENDED ACTION Given that the roundhouse has largely been destroyed, no further action is recommended. The site may warrant inclusion on a local list, depending on locally devised criteria.

MANAGEMENT If any development threatened the historic integrity of the roundhouse base, it should be recorded with a view to analysing the cross-trees and identifying any earlier evidence for a windmill.

GRADING **



Photograph of Horndon-on-the-Hill Post Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



SITE NAME Orsett Post Mill Roundhouse

PARISH Orsett

DISTRICT Thurrock

NGR TQ642815

EHER 47636

CURRENT STATUS Con. Area No **Listed Grade** NL **EBAR** No

**STATUTORY LIST DESCRIPTION
HER DESCRIPTION**

FARRIES SURVEY (Extracts)

Orsett. Post mill. Exactly located by the existing roundhouse, which stands north of Mill House on the west side of Mill Lane, about 50 yards south of the junction with School lane.

The last miller at Baker Street ...was reported to have held a deed recording the building of a windmill in Orsett in 1684...Map evidence – Ogilby and Morgan (1678), Warburton, Bland and Smyth (c1724) and Chapman and Andre (1777) – supports the existence of a windmill at Mill lane, Orsett...The James family were associated with the post mill for a very long time. In November, 1783, Thomas James of Orsett, miller, insured the contents of the brick and timber windmill for £150. ...A full resolution of the details of the local mill construction and tenure, where removals and rebuilds are not to be ruled out, depends on further documentary evidence. ... A survey of the Orsett Estate in 1887 records the mill as disused, but in good repair, in the tenancy of T.Ridgewell; in 1882 Kelly list Ridgewell as farmer, not miller. The mill had gone by the date of the survey (1893) of the revised 2nd O.S. 1in. map. The single-storied roundhouse, without substructure, and well maintained, bids fair to achieve its century of independent existence.

JOHN BOOKERS SURVEY

07/09/1973

Well-preserved neat roundhouse standing a few yards N. of Ridgewell's Farm; easily identified for what it was but there are now double access doors and windows.

Present Use: Store

Condition: Good

ERO SOURCES:

SITE BACKGROUND:

Listed as significant mill remains in Wood 2005. On private property but can be seen from public roads or footpaths.

Field Survey 2011

24/05/2011

Well maintained and attractive roundhouse located within the secure front garden of the Mill House. On a small windmill mound and used as a gymnasium by the present owner. Tiled roof and brick elevations maintained in good condition.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C19	Brick, tile	L
Windmill Mound	Unknown	Unknown	L

ARCHAEOLOGICAL POTENTIAL

Given the levels of alteration survival of significant technology, fixtures and fittings survival of historic features is thought unlikely.

SITE SIGNIFICANCE

Subsequent reconstruction for residential use and the removal of the engine house and chimney

stack have all had a major impact upon the historic significance of this

RECOMMENDED ACTION

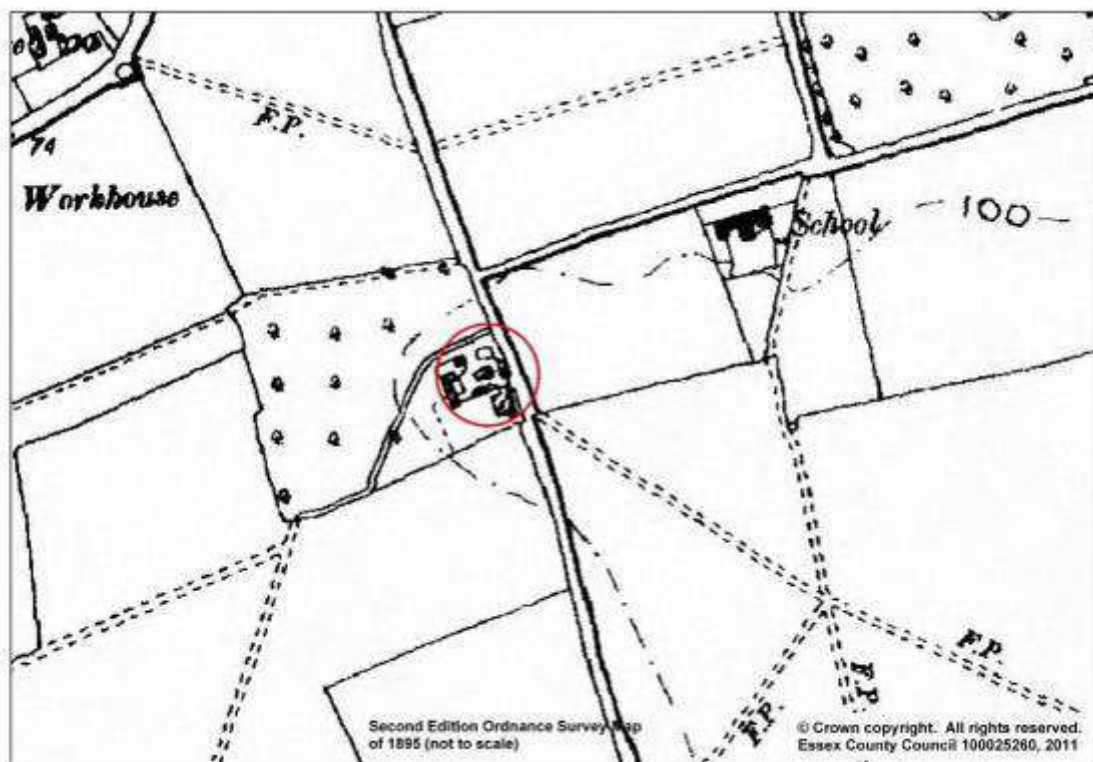
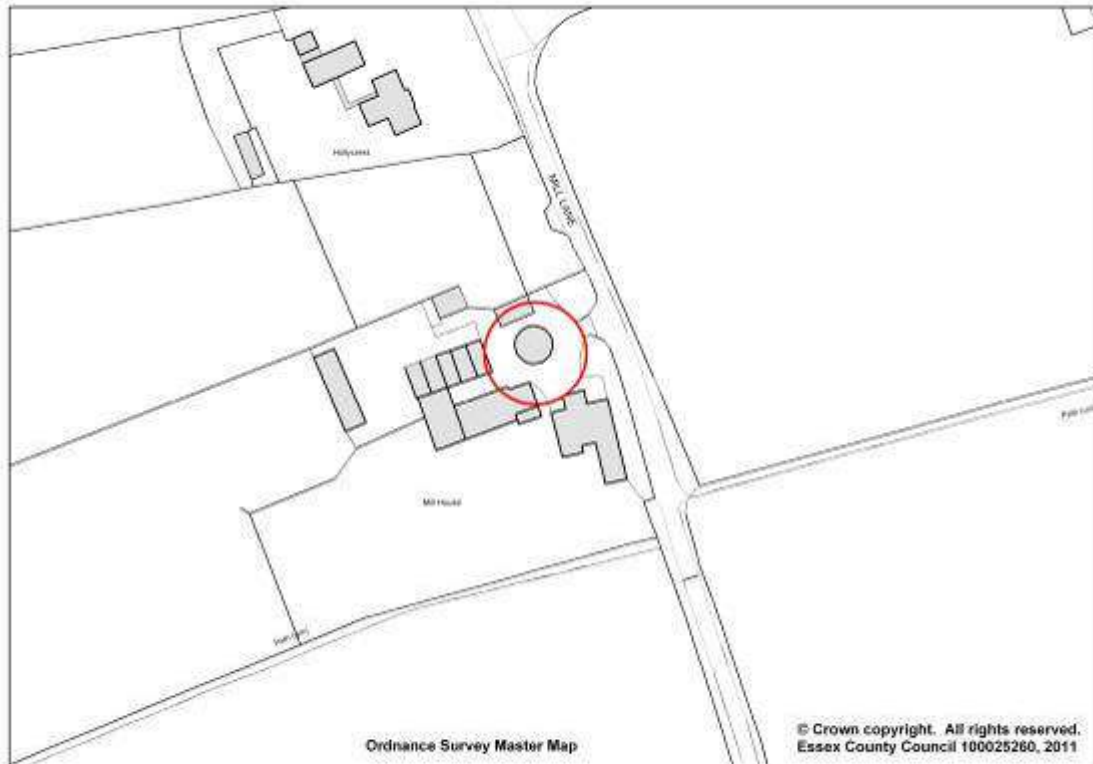
No particular action is required; the roundhouse is maintained in good condition and may be eligible for inclusion on a local list, depending on local criteria.

MANAGEMENT Presently in use as a private residence and accordingly maintained. A historic building survey is recommended if the roundhouse (or the site as a whole) becomes threatened by extensive alteration or demolition.

GRADING *



Photograph of Orsett Post Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



Smock Mills and Bases

SITE NAME South Ockendon Smock Windmill (demolished)

PARISH South Ockendon **DISTRICT** Thurrock

NGR TQ604831 **EHER** 5275

CURRENT STATUS **Con. Area No** **Listed Grade** NL **EBAR** No

STATUTORY LIST DESCRIPTION

This building is not listed.

KENNETH FARRIES SURVEY (Extracts)

Smock Mill, once incorporating a watermill. Stood on the south side of the moat at Hall Farm, approached by a drive leading eastwards from the parish church. TQ 604831. The detailed account in Farries volume 2 was written prior to the mill's collapse on 2nd November 1977.

JOHN BOOKERS SURVEY

30/10/1969

This mill, which was in bad condition in 1932, has been deteriorating progressively ever since through weather and vandalism and is probably beyond repair. Luckily the machinery of the mill, such as it was (rather than is) well-recorded, especially by Rex Wailes. The general structure is still in evidence but the weatherboard body is in a bad state on its brick base and the sails are fragmentary. The interior machinery is decaying and has suffered slight fire damage. The overall condition of this mill, which seems to be early nineteenth century, is a matter for serious concern.

Present Use: Disused

Condition: Very dilapidated

ERO SOURCES:

SITE BACKGROUND:

The building finally collapsed due to neglect in 1977

Field Survey 2011

25/05/2011

Rumours that foundations of the mill remained led to a site field visit. The location was searched but no trace of the building or foundations could be found. The local farmer employed on the site recalled the mill and remarked that part of the mill leat for auxiliary water mill still existed. Some of the machinery from South Ockendon was held in storage by Vince Pargeter for a while and may be at the Essex CC Mills Team Store. Some interest has been expressed by the Parish Council in recreating the mill on land close to the village itself.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
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ARCHAEOLOGICAL POTENTIAL

No mill could be identified but an outline is visible on aerial photographs.

SITE SIGNIFICANCE

Very low.

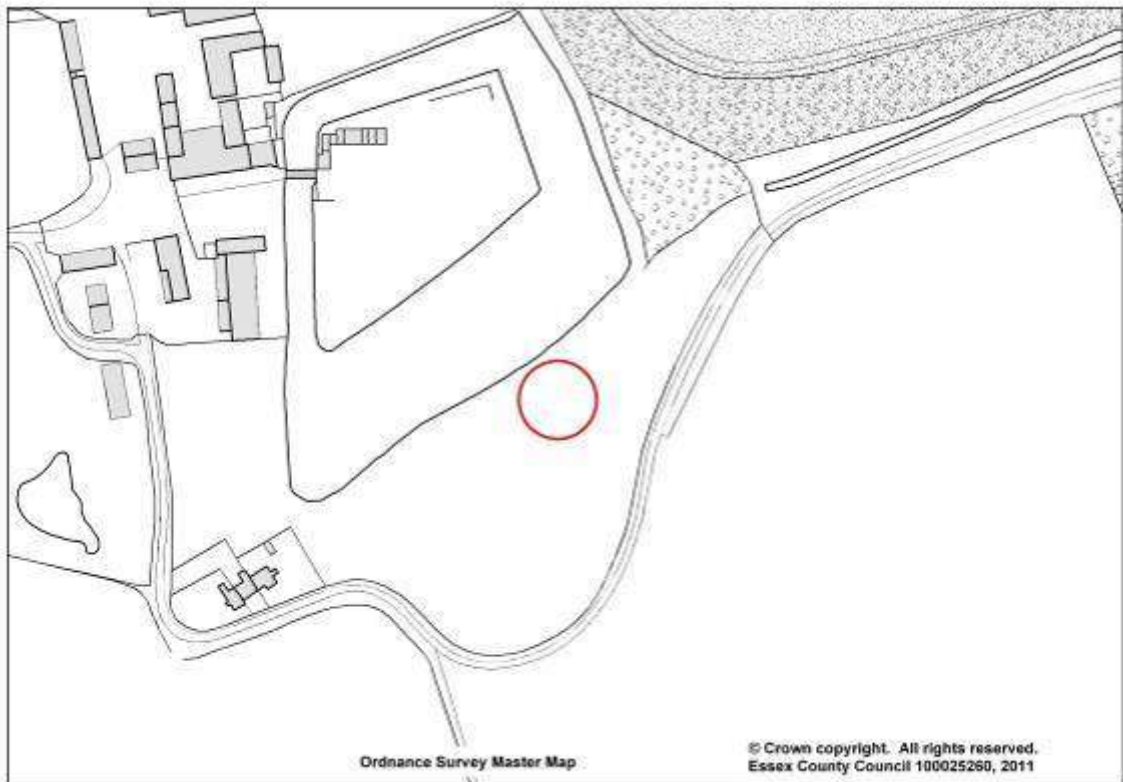
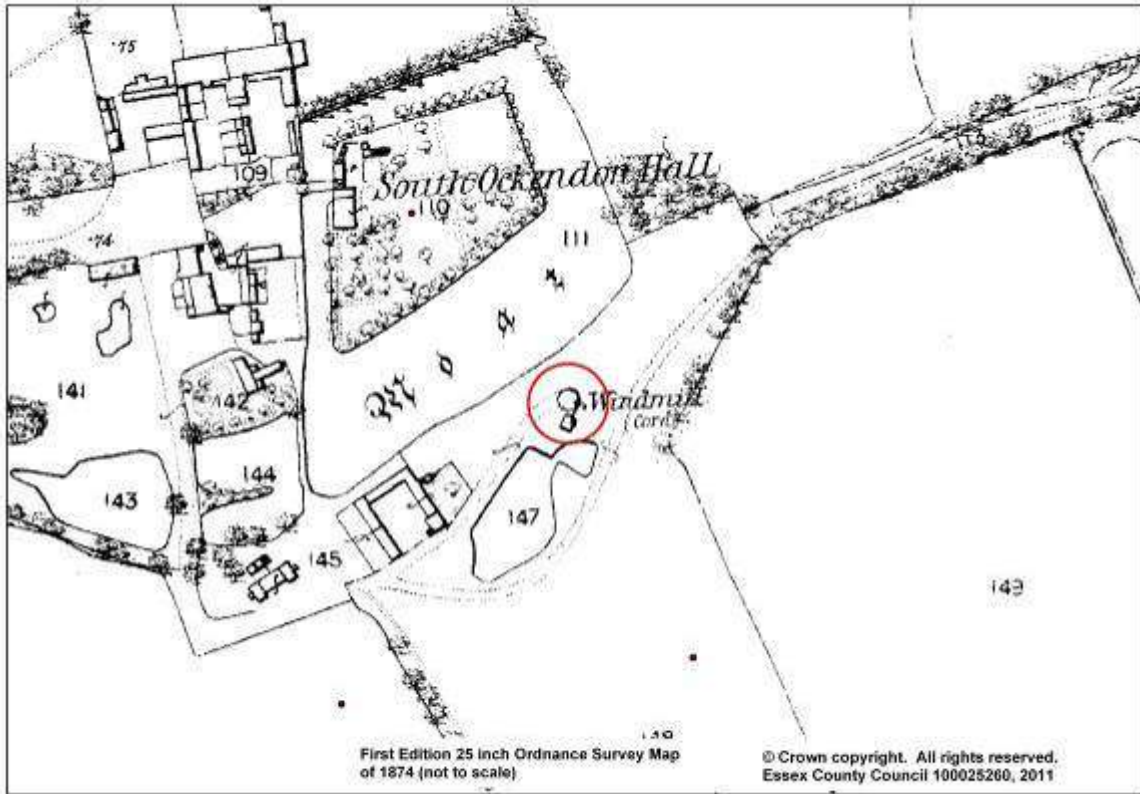
RECOMMENDED ACTION

MANAGEMENT If the site is subject to planning, of the site to check for the mill leat or mill foundations as referred to above.

GRADING 0



Photograph of South Ockendon Smock Windmill (demolished) (Google Maps Street view, retrieved on August 2011)



SITE NAME Baker Street Smock and Steam Mills

PARISH Orsett **DISTRICT** Thurrock

NGR TL 633913 **EHER** 35154

CURRENT STATUS **Con. Area No** **Listed Grade II** **EBAR**

STATUTORY LIST DESCRIPTION 23/06/1952

.
5221 BAKER STREET
Orsett
Baker Street Windmill
TQ 68 SW 5/30 8.2.60

II

2.

Said to date from 1674. Octagonal 2 storey weatherboarded smock mill on 2 storey brick base. Remains of gallery at first floor end. Mid C19 engine shed adjacent in red brick. All now ruinous.

Listing NGR: TQ6331081279

KENNETH FARRIES SURVEY

Smock mill. Stands undergoing modification (1984), behind Mill House south of Stifford Clays Road and a few dozen yards west of Baker Street. Baker Street mill probably dates from c.1796. It bears evidence of major structural alteration but most of the machinery (1975) appears original. ...The eight-sided brick base, rendered outside with cement, and having vertical whitewashed walls inside, is nearly 3 ft. thick at ground level. It has east and west facing doors, a third entry door on the north side, where the steam mill was built on. (A distance of some 15ft. separated the smock mill base from the steam mill building)...According to Lindsey, Baker Street mill was built in 1765, but no evidence for existence before 1796 has been found. During restoration of the wind and steam mills...two inscriptions were noted on the stone floor: RB1814 and SS 1762 which suggest a body raising operation between the dates given....the octagon of the smock frame is slightly askew from that of the brick base suggesting the lowering of a jacked-up frame on to a heightened base. (1975) appears original. the mill was marked disused by the 3rd O.S. (1915).

JOHN

BOOKERS

SURVEY

22/04/1971

A very sad relic of an early and unusual mill with an almost unique steam plant nearby. In 1932 the mill was 'becoming unsafe'. It is now in an advanced state of dereliction. The boat-shaped cap has disappeared, the gallery surrounding the mill has disintegrated and the sails are fragmentary. The octagonal brick base of two stories, an unusual feature, and the machinery is wooden apart from the cast-iron windshaft. The brake wheel is now visible above the remains of the weather boarded superstructure. The brick and slated steam mill, with chimney, is of particular interest. It shares a common loading gallery with the windmill and, more important, has an early A-frame steam engine by Middleton of Southwark. For a drawing of this beam engine see photo-albums of Essex Industrial Archaeology Survey, sub Orsett. The windmill is reputed to date from 1674 but is not shown on Chapman & Andre.

Present Use: Residential

Condition: Good

ERO SOURCES: T/Z 193 PHOTOGRAPHS, NOTES ETC. RELATING TO INDUSTRIAL

ARCHAEOLOGY SURVEY OF ESSEX

SITE BACKGROUND:

Baker Street's eighteenth century mill last worked in 1917. It was derelict for many years but refused to collapse. It has now been restored externally and the sails can turn. The adjoining steam mill forms part of a house conversion. With seven sets of millstones in their original position, this is largest intact historically important mill complex in Essex.

Field Survey 2011

26/05/2011

Set on a secured site, both the smock mill and the adjoining steam mill are retained in immaculate condition. Both now fully restored, the smock mill and steam mill have been converted to residential accommodation but without compromising the integrity of the historic machinery. This survey is a departure from the normal entries in that it should also be considered an update to the report on Baker Street Mills given in the Industrial Survey of Water and Steam Mills produced by the County Council in 2009.

Baker Street Mills is the best preserved combined wind and steam mill in Essex. Contains complete sets of operating machinery and millstones machinery have been retained both within the smock mill and within the steam mill and is hence the site as a whole is of very considerable historic importance.

Smock Mill

The mill was repainted two years ago but the owner is concerned about slight mould growth on the paintwork. Complete with mill machinery and 3 sets of French Burr millstones. Although the tuns are mostly complete, the operating mechanism consisting of damsel, horse and hoppers no longer exist. The whole was restored by Vincent Pargeter formerly Essex County Council Millwright and is currently maintained by a handyman under Vincent Pargeter's guidance. The sails are turned regularly and the machinery and cap are retained in excellent working order.

Steam Mill

Baker Street Mills contain one of the first steam corn mills in Essex which is therefore of considerable historic importance. This is a single cylinder rotative A-frame beam engine from Middleton Southwark with a complete flywheel that was constructed c. 1840. Unfortunately the horizontal beam itself and the motion rods have been removed. Mounted on a stone plinth. Single piston engine. Adjoining is the flywheel and the riveted plate fire-tube boiler with intact dials and controls. Horizontal shaft transfers the drive to the spur wheel in the next room. Wooden bridge trees and iron tentering gear control stones on floor above. 4 sets of French Burr millstones were noted on first floor, but the remaining machinery was not examined. The owner has given permission for a detailed examination and survey of this largely complete steam mill. Constructed c.1840 by Thomas Middleton & Co., Engineers, Loman Street, Southwark, London S.E. Drawing in ERO T/Z 193 as above.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill	C19	Wood, Brick iron	H
Steam Mill	C19	Wood, brick, iron	H
Sails	C20	Wood, iron	M
Machinery	C19	Wood, iron	H

ARCHAEOLOGICAL POTENTIAL

High with regard to standing remains on site, internal machinery and features having been well restored.

SITE SIGNIFICANCE This is a highly significant windmill which has been lovingly restored and well maintained. Many internal fixtures and fittings survive and it has important group value with the associated steam mill and buildings.

RECOMMENDED ACTION

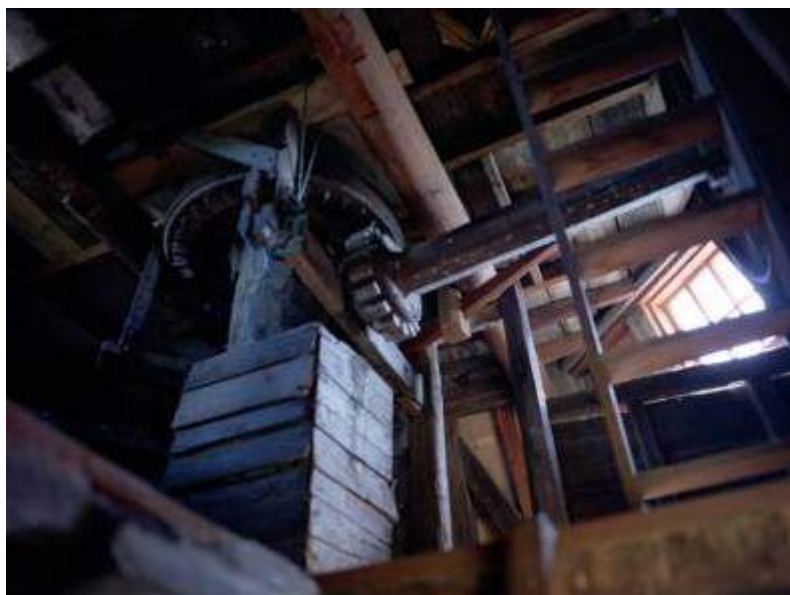
Upgrade to Grade II*

MANAGEMENT The smock mill is in very good repair. A detailed historic building survey at RCHME level 3 should be recommended if the mill is threatened by major works or demolition.

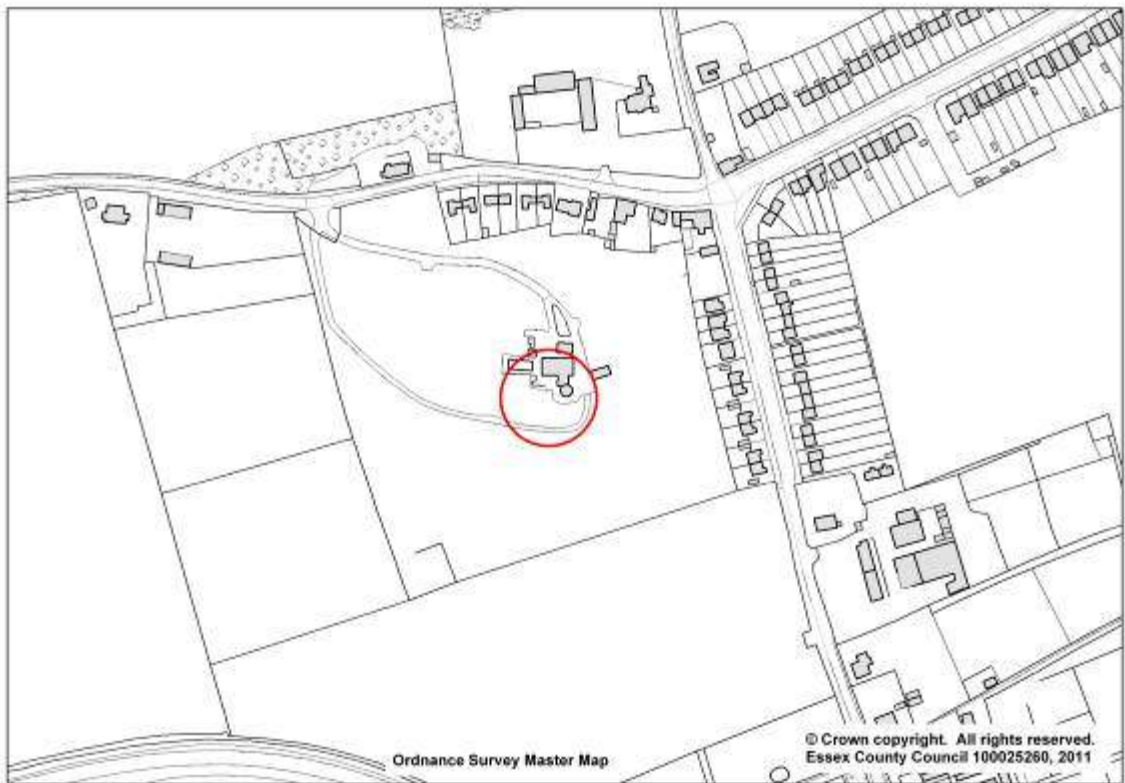
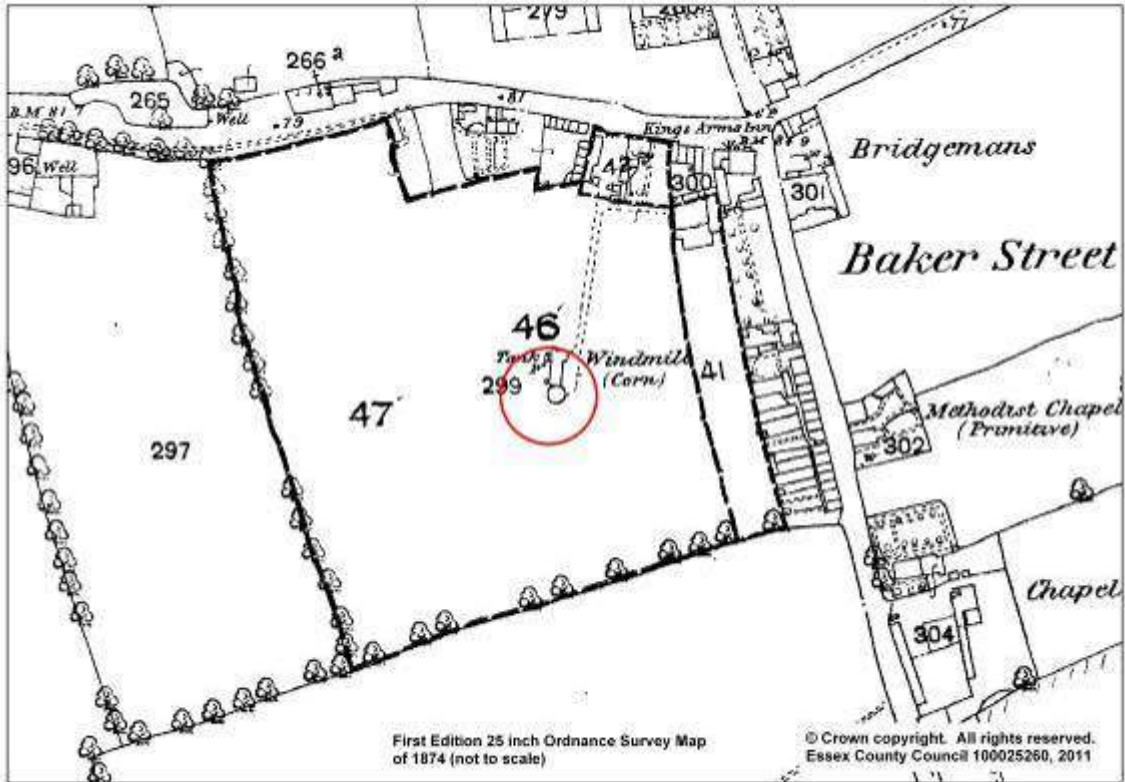
GRADING ***



Photograph of Baker Street Smock and Steam Mills



Photograph of interior gearing at Baker Street Smock and Steam Mills



Uttlesford District

Post mills and Roundhouses

EHER	Name	Grade
35475	Ashdon Post Mill	****
37194	Aythorpe Roding Post Mill	****
4670	Henham Post Mill Roundhouse	*
38145	Site of Welford's Windmill	*
4098	Moreton Post Mill (Demolished)	0
36768	Throws Mill Roundhouse	*

Smock Mills and Bases

EHER	Name	Grade
1323	Lindsell Smock Mill	0
251	Wimbish Tye Green Smock Mill Base	*

Tower Mills

EHER	Name	Grade
35729	Clavering North	***
35727	Clavering South	***
177	Debden	**
37772	Great Dunmow	**
36559	Stansted	****
1411	Thaxted	****
4364	White Roding	***

Post mills and Roundhouses

SITE NAME Ashdon Post Mill

PARISH Ashdon

DISTRICT Uttlesford

NGR TL 595426

EHER 35475

CURRENT STATUS Con. Area No

Listed Grade II

EBAR

STATUTORY LIST DESCRIPTION

23/06/1952

.
ASHDON STEVINGTON END

1.

5222

Windmill

TL 54 SE 6/54 21.2.67

II

2.

Weather-boarded postmill probably of C18 origin (the date 1763 is scratched on a beam) but the brick roundhouse is of 1830-40. Renovated in the C20.

Listing NGR: TL5952242537

KENNETH FARRIES SURVEY (Extracts)

Post Mill. Stands today (1983) maintained as a landmark, at Stevington End. Referred to also as Bartlow Hamlet (or End) Mill. Newly erected 1757 by William Haylock, carpenter of Ashdon. No windmill mound but the mill enclosure stands slightly proud above the amply winded summit level, probably not entirely natural in origin. In 1775, the property, again for sale, included a bolter, bakehouse and brewhouse. In 1813 when the sale of the mill was advertised it apparently had two pairs of stones and granaries nearby sufficient to hold 130 quarters of wheat but apparently no roundhouse. There is clear evidence that the mill was extended at the rear presumably to accommodate a second pair of stones, some time before 1813. The head and tail arrangement was maintained until the last. The driving wheels remain in situ but the stones have been taken out to relieve the weight...Ashdon mill forms an elusive landscape feature, approached off a minor road by a narrow and winding cul-de-sac leading up to the hill-top site of popular expectation...the mid-eighteenth-century builder raised a token mound.

JOHN BOOKERS SURVEY

22/04/1971

Post mill with roundhouse and tailpole. Noted in 1932 that there were two pairs of stones the larger (4ft 9 in diameter) driven from the brake wheel, the smaller (4 ft diameter) driven from the tail wheel. It was believed that the mill had not been worked for about 20 years. Noted in 1958 by Wailes that this was one of three wooden windshafts surviving in the county and the only one with an iron poll end. Described then as a 'head-and-tail' mill with two pairs of stones; the tail bridgetree was cast iron and forked.

D/DMg T39 1757 Deed refers to a windmill nearly-erected by William Haylock of Ashdon, carpenter, within the manors of Walton & Overall. This seems to be the present mill but D. Smith thinks it was originally open trestle and the roundhouse was perhaps added c. 1830-40. Much of the machinery has obviously been renewed. A date 1763 is allegedly carved on a beam.

Present Use: Maintained for the public

Condition: Deteriorating, but repairs have been made

ERO SOURCES:

D/DMg T39 1757 Deed

SITE BACKGROUND:

Known latterly as Bragg's Mill, Ashdon Post Mill went through at least 8 changes of ownership between construction, dated by indenture to 1757, until the end of its productive life around 1912. It survived surprisingly well until 1932, when it was examined by mills specialist Rex Wailes who remarked that the main timbers were surprisingly sound. Restoration of the mill has been an ongoing issue since 1932 when timber props were inserted at ground level to support the weight. Eventually restoration commenced in the late 1950's and the mill finally being fully restored as late as 2010.

Field Survey 2011**28/02/2011**

Easily accessible, the mill is located on an elevated site with good parking. Complete and restored with money from a local land owner and the community. Fully working.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post mill	C18	Wood, Brick base	H
Roundhouse	C19	Brick, tile	H
Sails	C20 replacements	Wood, iron	L
Machinery	C19	Wood, iron	H
Windmill mound	C18	Unknown	M

ARCHAEOLOGICAL POTENTIAL

The building is structurally intact and the owner has restored the windmill and it is structurally intact.

SITE SIGNIFICANCE Important example of an unconverted windmill that has been lovingly restored and is maintained in good condition.

RECOMMENDED ACTION

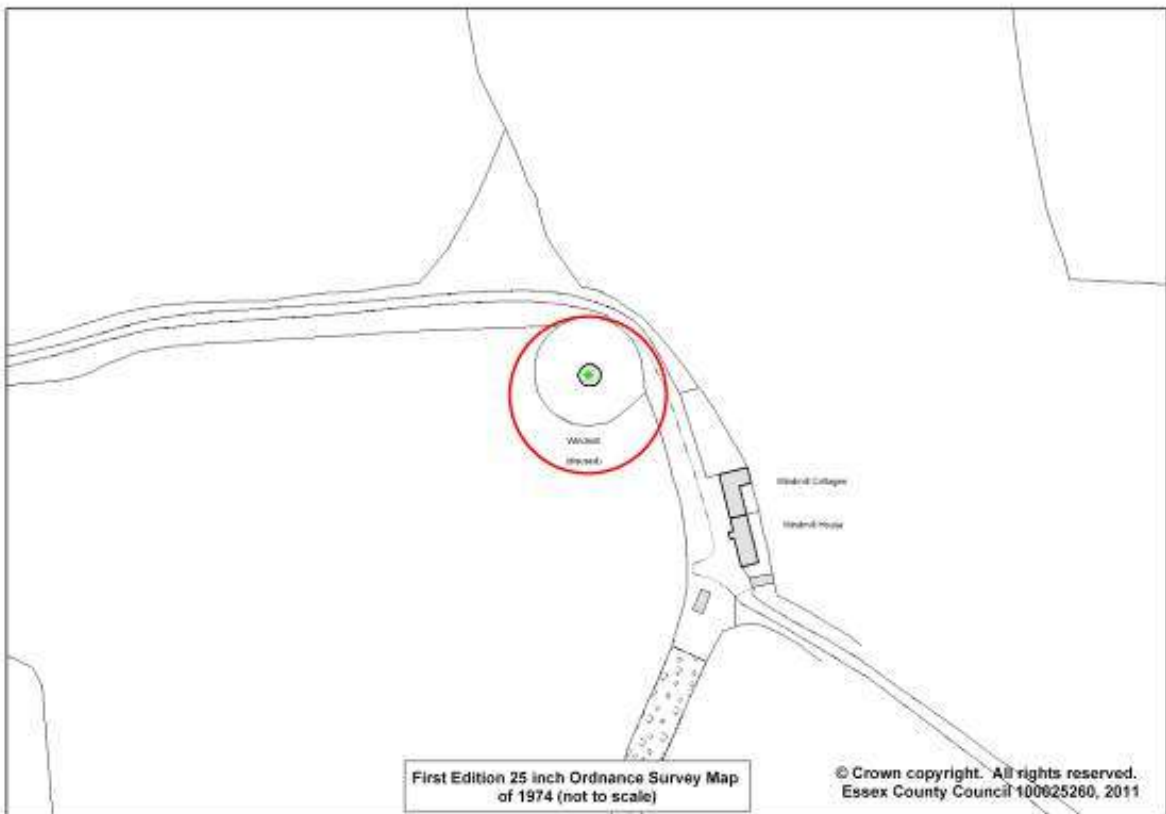
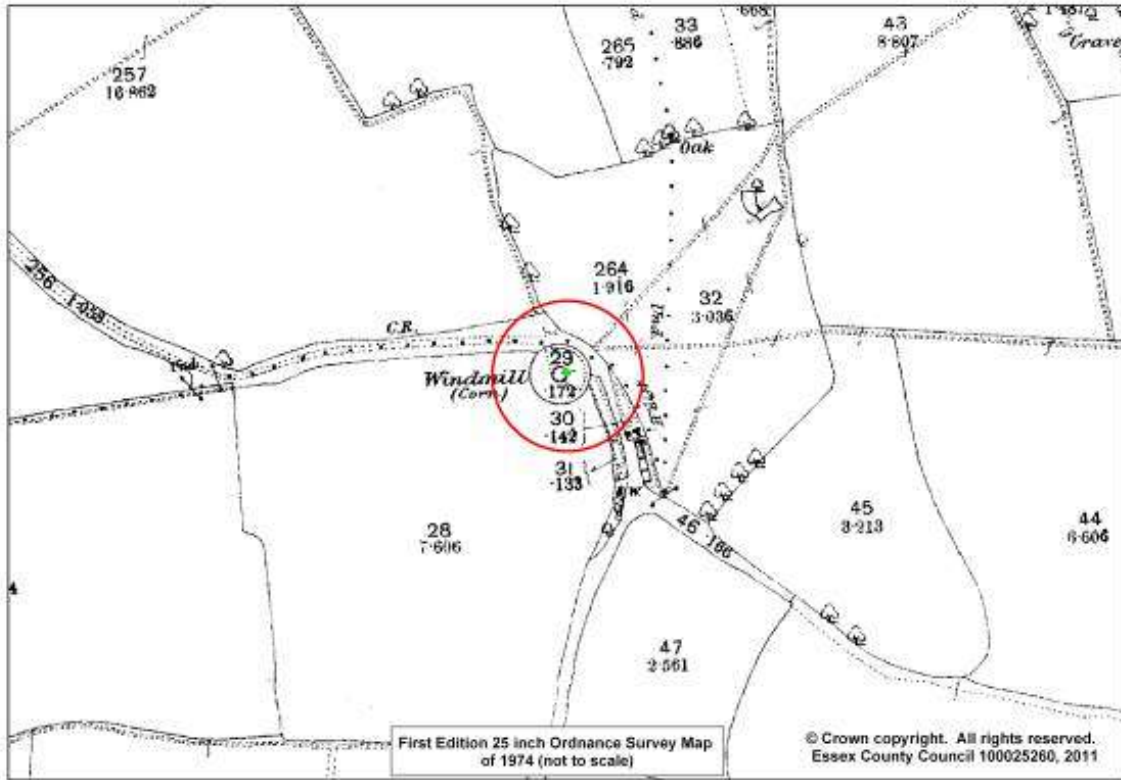
Meriting an upgrade to its listed status from Grade II to II* bringing the mill into line with Aythorpe Roding Post Mill and Mountnessing Post Mill.

MANAGEMENT in private ownership, occupied and well maintained. If the mill becomes the subject of a planning application for residential and/or other re-use all efforts should be made to preserve its current levels of historic integrity. Prior to any agreement an impact assessment should to be carried out to inform conservation bodies of the significance of the building, sensitivity of areas within the building, importance of its technology and the likely impacts of any proposed development on the fabric. These issues can then be addressed through mitigation

GRADING ****



Photograph of Ashdon Post Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Aythorpe Roding Post Mill

PARISH Aythorpe Roding

DISTRICT Uttlesford

NGR TL 591152

EHER 37194

CURRENT STATUS **Con. Area** No **Listed** Grade II **EBAR** No

STATUTORY LIST DESCRIPTION

23/02/1967

TL 51 NE AYTHORPE RODING GUNNERS GREEN

2/83, WINDMILL

23.2.67

II*

Post mill, late C18 with C19 alterations, restored 1975-82. Timber-framed buck, weatherboarded, rotating on timber post; roundhouse of red brick with boarded roof, The mill consists of a timber-framed buck incorporating jowled corner posts, mounted on an oak post about which it can be turned to face the wind. The main access steps to the buck are carried on cast iron wheels which run on a circular track of granite. A six-bladed fantail is mounted on a frame above the steps and is geared to the wheels to turn the mill into the wind. The 4 sails are of the double-shuttered patent type, and revolve anti-clockwise. They carry a half-set of wooden-framed canvas-covered shutters which can be set and adjusted from the lower floor of the buck. The mill drove 2 pairs of french burr millstones, 1.22 metres in diameter, on the first floor of the buck. In addition there is one pair of French stones 1.37 metres in diameter on a cast iron hoisting in the roundhouse to take drive from a portable steam engine. The brake wheel and wallower are wooden and the spurwheel and stone nuts are cast iron, all wood-cogged. Two pairs of centrifugal governors control the millstone adjustment. There is a bolter-type flour dresser in the rear of the millstone floor. The date of building is not known but is probably circa 1770. Like most English mills this one has been modernized during its working life, and incorporates most of the improvements in windmill development over that period. It last worked commercially in the early 1930s. By 1975 it was in need of major repair, which was completed in 1982, when it was restored to working order. It is the largest remaining post mill in Essex. There is a set of measured drawings and photographs by Messrs. Hunt and Sancholls, 1967, in the NMR, and additional information is held by Essex County Council Planning Dept. and Essex Record Office.

Listing NGR: TL5903415159

KENNETH FARRIES SURVEY

Post mill, preserved by Essex County Council and by 1982 restored to working order. Stands west of Mill house at the end of a short spur leading west from the Dunmow road 450 yards south of the turning to High Easter. The date of erection of this mill may be as inscribed on a timber: 'Built 1779', discovered by Vincent Pargeter...The title map represents it by a drawing of a post mill with an open substructure. This was no doubt a true rendering...elderly residents remembered the addition of a roundhouse. In 1983, this mill became the first to respond to wind power after more than 30 years. ...The windmill at Aythorpe Roding, following one of earlier vintage, was built for ready access by the highway and near the village...With regard to body framing, Aythorpe Roding was built larger than most Essex mills...Aythorpe Roding windmill also has a history with regard to deployment of stones. It was clearly built with the operation of two pairs in mind, and placed head and tail. Apparently starting life with a wooden windshaft, it was later fitted with the existing iron shaft...

JOHN BOOKERS SURVEY

16/02/1973

One of the more well-known preserved windmills in Essex and a common subject for photography. This mill has a fantail mounted on the ladder which is unusual in Essex; more generally the tailpole was considered sufficient. The roundhouse, 24 feet diameter, is probably the largest in the County. For details of the machinery see both Smith and Wailes who recorded in detail. One feature, which they do not mention, is the hursting, carried on cast iron columns, and now stored in the roundhouse. This has the name 'Christy Chelmsford' cast on it.

Present Use: Preserved

Condition: Good

ERO SOURCES:

SITE BACKGROUND:

This is the largest remaining post mill in Essex. It was built sometime before 1770 on an ancient mill site which was in use before 1615. It was offered for sale for demolition in 1860 when it was probably over 90 years old but amazingly avoided that fate and went on working until 1936, its final years of operation being by the Belsham family who added an auxiliary steam engine for use on windless days. One hundred and twenty years after being offered for demolition it became the first restored mill in the County to grind by wind power. It has been altered considerably during its long life. There is evidence that at first it had one pair of millstones in its 'head' and one pair in its 'tail', used a wooden windshaft and was turned to wind by a long tailpole. Almost certainly its first sails would have been of the cloth spread common type. Later an iron windshaft replaced the wooden original and two pairs of stones in the head of the mill superseded the head and tail arrangement. A bolter was fitted to clean and dress the meal, and shuttered patent sails replaced the commons. A roundhouse to protect the wooden trestle from the elements and act as a grain store and a fantail to keep the mill facing the wind automatically were also added as time went by.

Field Survey 2011

28/02/2011

The mill is regularly visited and inspected by the Essex County Council mills team and maintained in good order. The sails are not fixed but the brake is kept on and webbing prevents movement should the brake wheel give way. The millstone sets, great spurwheel, tentering gear and bridgetrees are all intact and the mill is in operating condition. The winding mechanism works automatically keeping the mill turned into the wind. Inside the roundhouse a separate cast iron hurst houses a single set of stones. This had been installed for use with a portable steam engine located on the north side of the roundhouse and outside the building. The patent sails are operated from the spout floor by an internal striking chain. An unusual feature also seen at Bocking Church Street is the mezzanine floor within the roundhouse. The fantail gear traverses a track consisting of stone sets.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Post mill	C18	Wood, Brick base	H
Roundhouse	C19	Brick, tile, iron	H
Sails	C19	Wood, iron	H
Machinery	C19	Wood, iron	H

ARCHAEOLOGICAL POTENTIAL

Aythorpe Roding windmill is a well preserved windmill with much of the original machinery still intact. The site may have been in continuous occupation as a mill since the medieval period.

SITE SIGNIFICANCE

The largest windmill in Essex, Aythorpe Roding windmill is maintained in good condition by

Essex County Council and contains a number of original fixtures and machinery. It is one of the few examples of windmills that have not been converted to residential use.

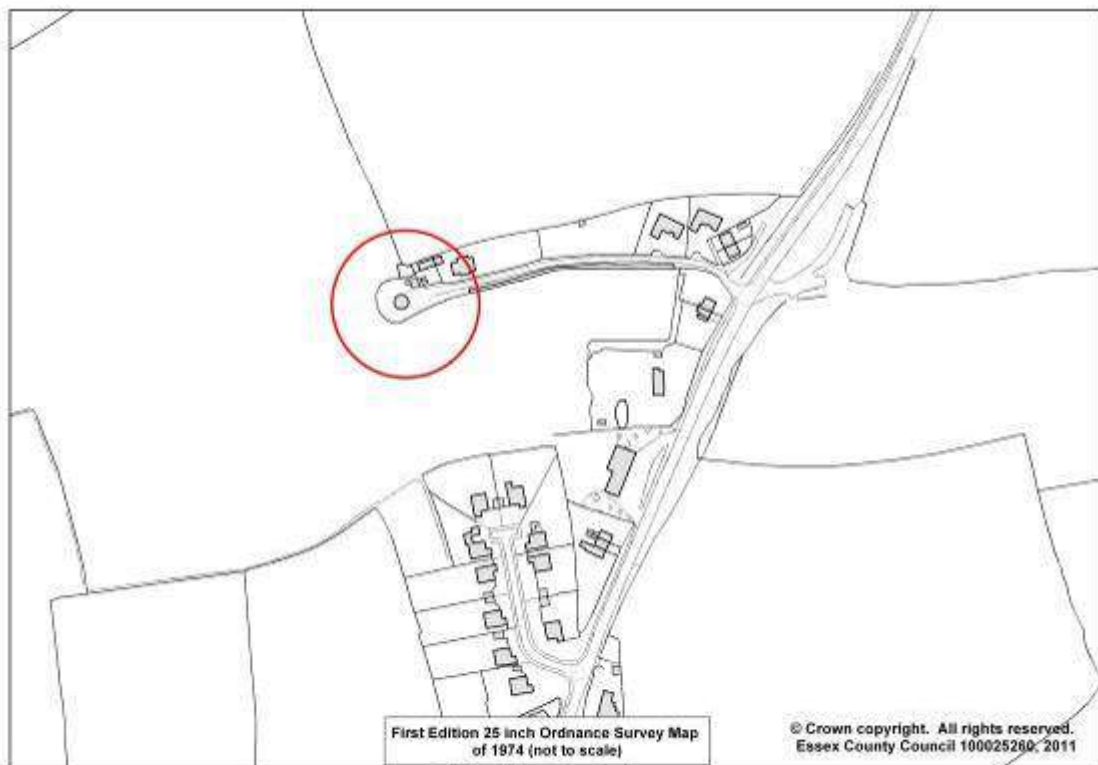
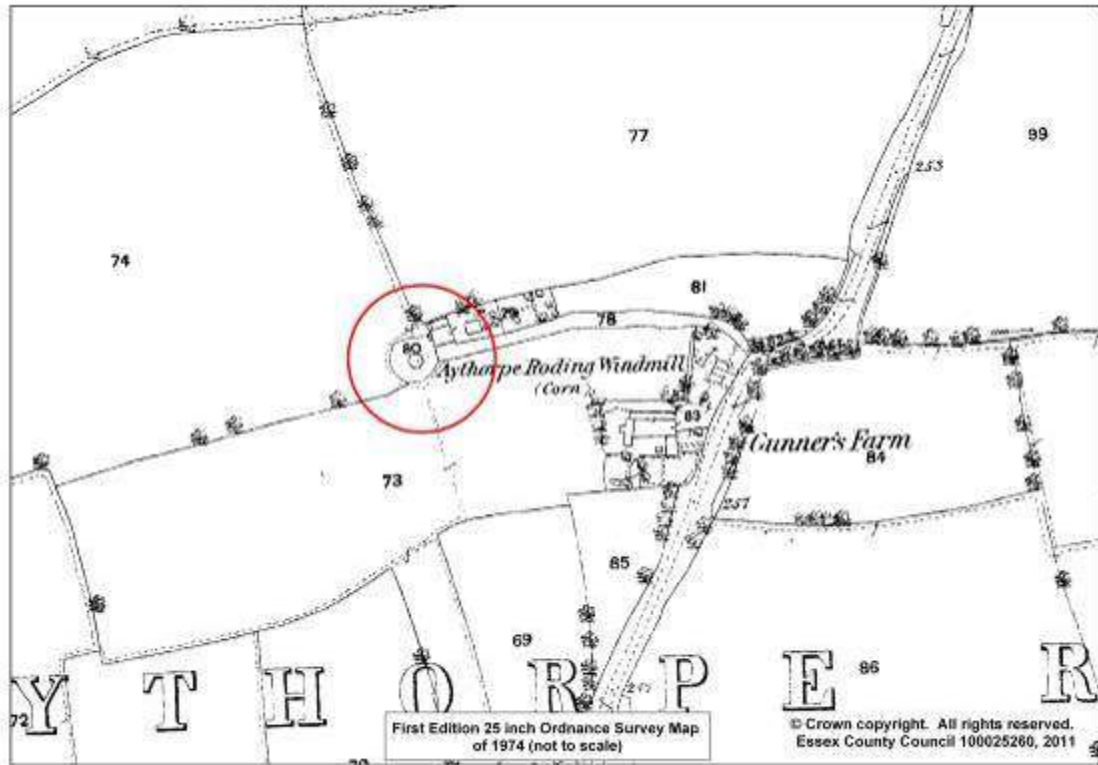
RECOMMENDED ACTION Maintain Grade II status, listing building description needs updated.

MANAGEMENT Prior to any significant future construction work to the mill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mill's original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent

GRADING ****



Photograph of Aythorpe Roding Post Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Henham Post Mill Roundhouse

PARISH Henham **DISTRICT** Uttlesford

NGR TL544275 **EHER** 4670

CURRENT STATUS **Con. Area No** **Listed Grade** NL **EBAR** No

STATUTORY LIST DESCRIPTION

KENNETH FARRIES SURVEY

Post mill. Stood south of Mill House and south of the village centre, where the thatched roundhouse, brick-built, still marked the site in 1973, but has been reduced to a circle of brickwork about 2ft. high.

JOHN BOOKERS SURVEY

07/09/1973

Roundhouse of former post windmill. Brick and thatched roundhouse surviving from base of windmill. A thatched roundhouse is rare but this was not the original covering.

Present Use: Garden wall

Condition:

ERO SOURCES: ERO D/A CR 18 p.254

SITE BACKGROUND:

(Farries)

Historically interesting, the mill at 'Henham on the Mount' appears on the Ogilby and Morgan map of Essex (1678) and on Chapman & Andre. It was the subject of a will in 1773. An insurance policy of 1805 (ERO above) specifies the property in detail and the sum insured amounted to £2,400, this included windmill and roundhouse £300, standing and going gears £100 and stock and moveable utensils £200. It was considered to have a spacious roundhouse, large French burr stones and a superbly winded position. By 1871 the mill was employed in grist production, using anti-clockwise single-shuttered sails. The mill was last worked by Robert Wright (1894) and a press notice of 1903 referred to its dismantling. This apparently was due to competition on the estate from powered grinding which took away the millers living.

Field Survey 2011

20/06/2011

Brickwork circle in yard; flower bed in centre. Visible in aerial pictures. Not visited in view of the fragmentary nature of the remains.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C18	Brick	L
Mound	Unknown	Unknown	H

ARCHAEOLOGICAL POTENTIAL

The site was in existence from the post-medieval period, but has been mostly demolished.

SITE SIGNIFICANCE

Given the fact that the windmill has been mostly demolished, there is very little remaining historic significance.

RECOMMENDED ACTION

Given the fragmentary remains of the site, it does not seem that the site would warrant

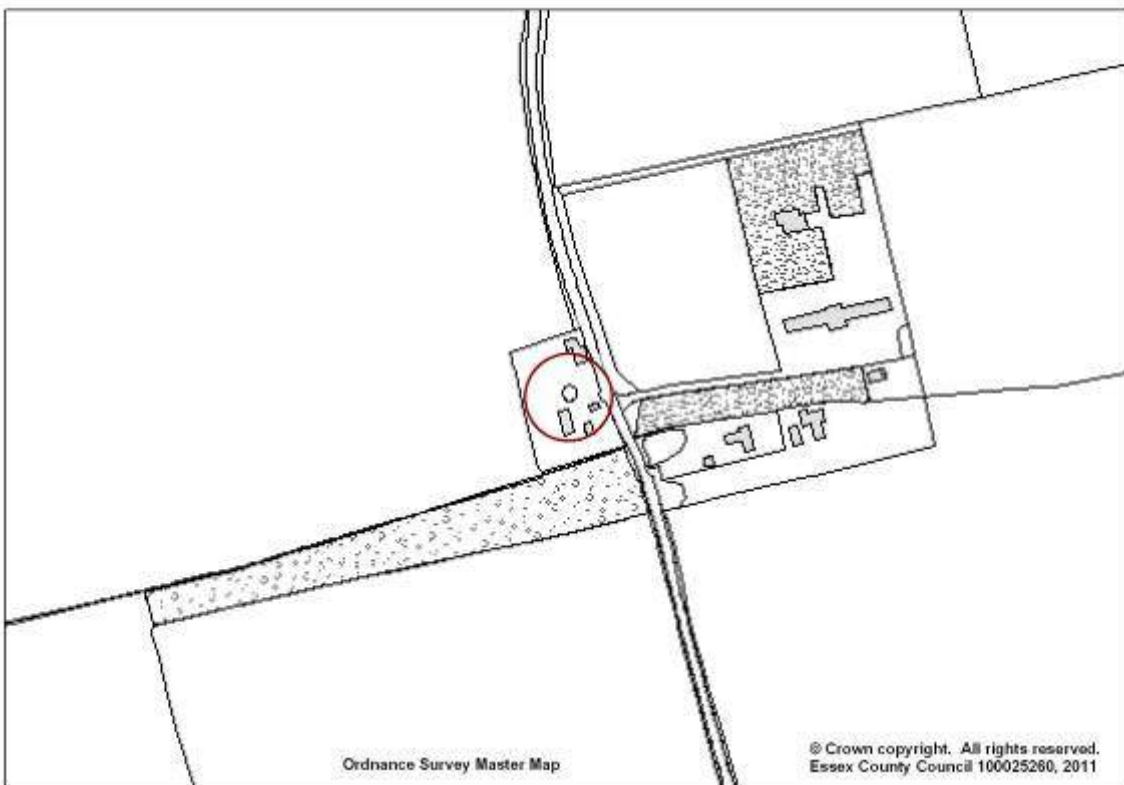
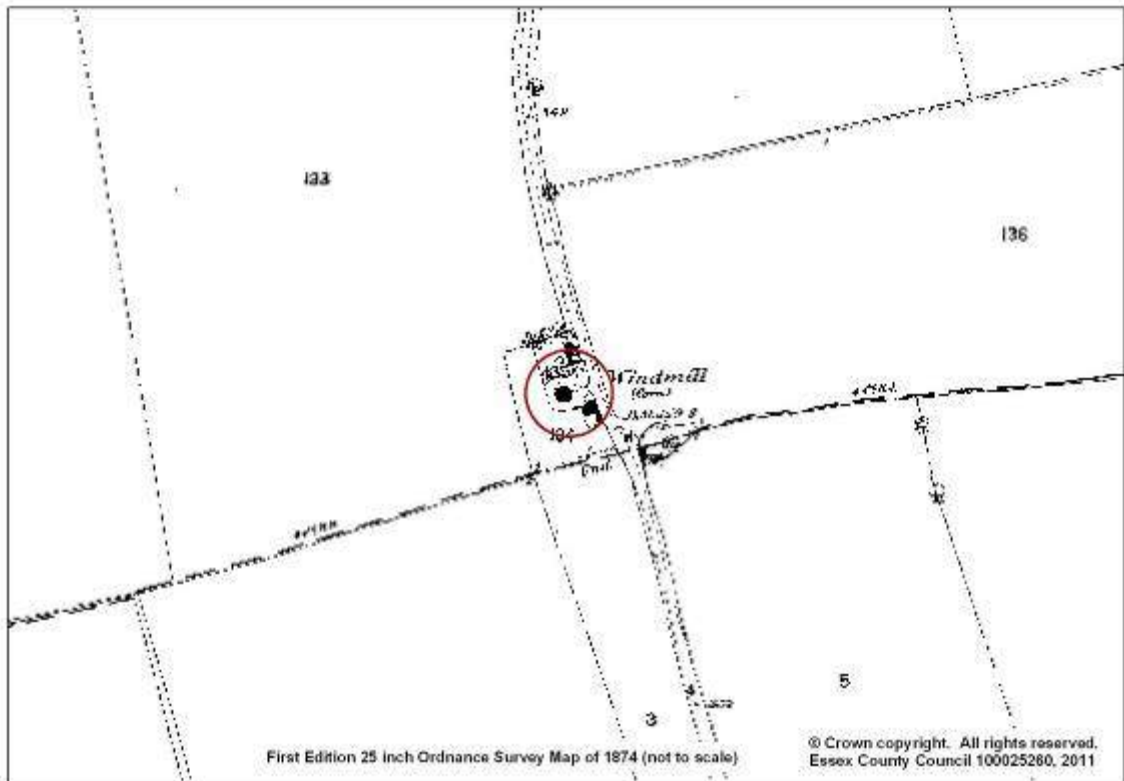
inclusion on a local list or a statutory list.

MANAGEMENT Should the opportunity arise through proposed planning applications, it would be interesting to investigate the below ground features associated with the site.

GRADING *



Photograph of Henham Post Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



SITE NAME Site of Welford's Windmill

PARISH High Easter

DISTRICT Uttlesford

NGR TL 619143

EHER 38145

CURRENT STATUS **Con. Area No** **Listed Grade II** **EBAR** No

STATUTORY LIST DESCRIPTION

121346

TL 61 SW

HIGH EASTER

3/28

The Mill House with attached bakehouse/ brewhouse

II

House. Early C17. Timber framed and plastered with C20 pargetting and gabled peg tile roof. Of 2 storeys and conventional central lobby entry plan type with square ridge line stack and 4 attached diagonal shafts. Windows are C20 leaded light casements. House has stop chamfered bridging joists and main frame, jowled posts and exposed side purlin roof with curved wind braces. Original stack in stack bay has stair behind and arch headed fireplaces to parlour and solar. Tie beam to north side of stacks originally had arched braces. Small diamond mullion window to rear staircase. C20 rear extension and glazed conservatory on south side. Attached one storey bakehouse/brewhouse on south east corner, of timber framing with brick gable end stack and exposed brick oven with lean-to peg tile roof.

Listing

NGR:

TL6191414302

KENNETH FARRIES SURVEY

Post mill: Fuller's, later Webster's, then Shead's Mill. The substructure stands enclosed in a residence named the Old Mill west of the lane leading south from the village at a point 500 yards south south west of the church....one may still walk freely under the crosstrees in a lounge of distinction. By 1902, the mill had three pairs of stones and an auxiliary steam engine driving a further pair of stones in the roundhouse. Winding was by a tail pole. The roundhouse was single storied, but of ample size and had a tarred roof...

JOHN

BOOKERS

SURVEY

10/06/1970

This windmill was not included in John Booker's survey

Present Use: Converted into an unusual modernist house

Condition: Condition of the base unknown

ERO SOURCES:

SITE BACKGROUND:

The windmill mound raised on a natural vantage point suggests a comparatively early occupation date. And an assignment of mortgage is recorded here in 1680.

Field Survey 2011

Suggested by S. Burden (pers. Comm.) that the house contains the original trestle, but no site visit undertaken.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse within modern property	C19	Brick base	M

ARCHAEOLOGICAL POTENTIAL Due to the extensive levels of building works associated

with its conversion to residential use no significant technology, fixtures or fittings survive within. Site of Welford's Windmill and few original external features remain.

SITE SIGNIFICANCE

Given that the windmill has been completely converted into a residential property, it is thought that the significance is very low.

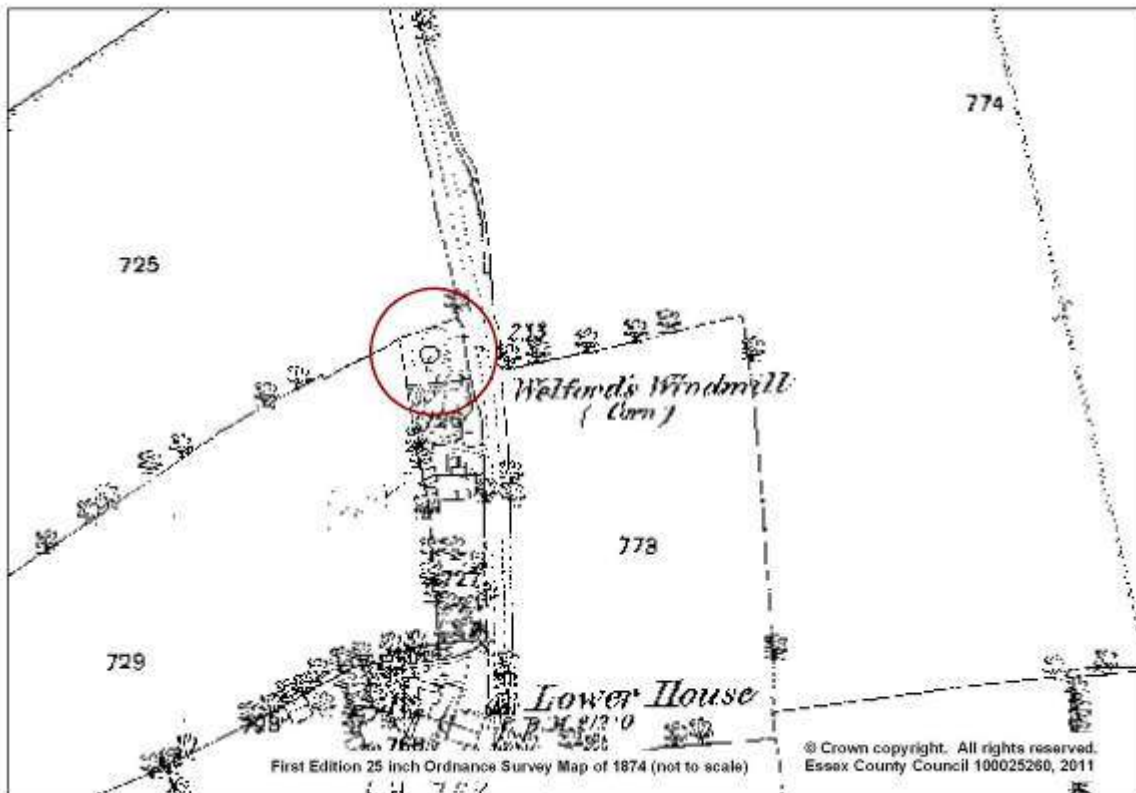
RECOMMENDED ACTION Given the level of construction work required to make the conversion to residential accommodation, it can be assumed that no internal fixtures survive. While inclusion on a local list may be warranted, it would not meet the specification for listing.

MANAGEMENT Should the opportunity arise an internal inspection of the mill is recommended to assess internal spatial configurations and survival of technologies fixtures and fittings, and to see if any evidence of the trestle survives.

GRADING *



Photograph of Site of Welford's Windmill (Google Maps Street view, retrieved on August 2011)



SITE NAME Moreton Post Mill (Demolished)

PARISH Moreton

DISTRICT Uttlesford

NGR TL 632980

EHER 4098

CURRENT STATUS

Con. Area No

Listed Grade NL

EBAR No

STATUTORY LIST DESCRIPTION

This building is not listed.

KENNETH FARRIES SURVEY

Post mill. Stood east of the road leading north of the village centre towards Matching, 350 yards from the junction with the westward turn to Magdalen Laver. Site concreted and occupied by Gould's lorry park. At Moreton the sails ceased turning in about May 1931. A visit a few years later saw Moreton Mill still festooned with flour-laden cobwebs. Near unique and was one of eight post mills known in England with three cross trees and six quarterbars. Strong tradition that the mill was moved to Moreton early in the 18th century from a point variously stated to have been Stratford, Wanstead and Bishops Stortford. A fine inscription on the centre post a little below the crowntree, and now preserved (1976) in the Holy Trinity church museum, Colchester, reads;

TIMOTHY WEEDON
THOMAS DAGNALL
1715

As a preserved mill, the old structure had a short life...was taken down in 1964 and cremated forthwith. Peter Gould had a model made at a scale of 1:24 (*now in Epping museum*). Moreton Mill was selected by Farries for detailed review in the Chapter 'The technology of the Essex windmill' in Volume II.

JOHN BOOKERS SURVEY

Not listed

Present Use: Built over

Condition: Demolished

ERO SOURCES: D/DU 197/5 1861

Hills, A., Four Essex Windmills, Essex Review, XXXIV, 1930, 84

SITE BACKGROUND:

One of the earliest post mills erected in Essex and thought to date from 1694, according to inscription in Colchester Museum. Regrettably lost in 1964.

Field

Survey

2011

24/05/2011

Interview with an elderly resident Jim Wheatley and a former employee of Gould's who managed the windmill at the time of the collapse in 1964. Recalled the mill which they used until 1939 and site was noted, but no standing remains were observed. Mr Wheatley pointed out the only visible remnants which were two French Burr millstones stones set into the pavement and some wrought iron bolts some 2ft. in length which were taken from the quarter bars at the time of the demolition in 1964. By 1964, the mill was in a dilapidated state. The initial damage occurred when the millwright attempted to fit a new pair of sails. After the first of the pair had been fitted the sail was turned into the St George Cross position to fit the second

new sail at the bottom but the extra weight loading caused the first new sail to break off and fall to the ground. Soon after that the entire mill was demolished. Four wrought iron bolts were given by Mr Wheatley to the Essex Mills Support Officer and will either be displayed at one of the County's mills or be presented to an appropriate museum.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Trestle Post	C18	Wood	H

ARCHAEOLOGICAL POTENTIAL

As the site has been built over there is not thought to be any archaeological potential.

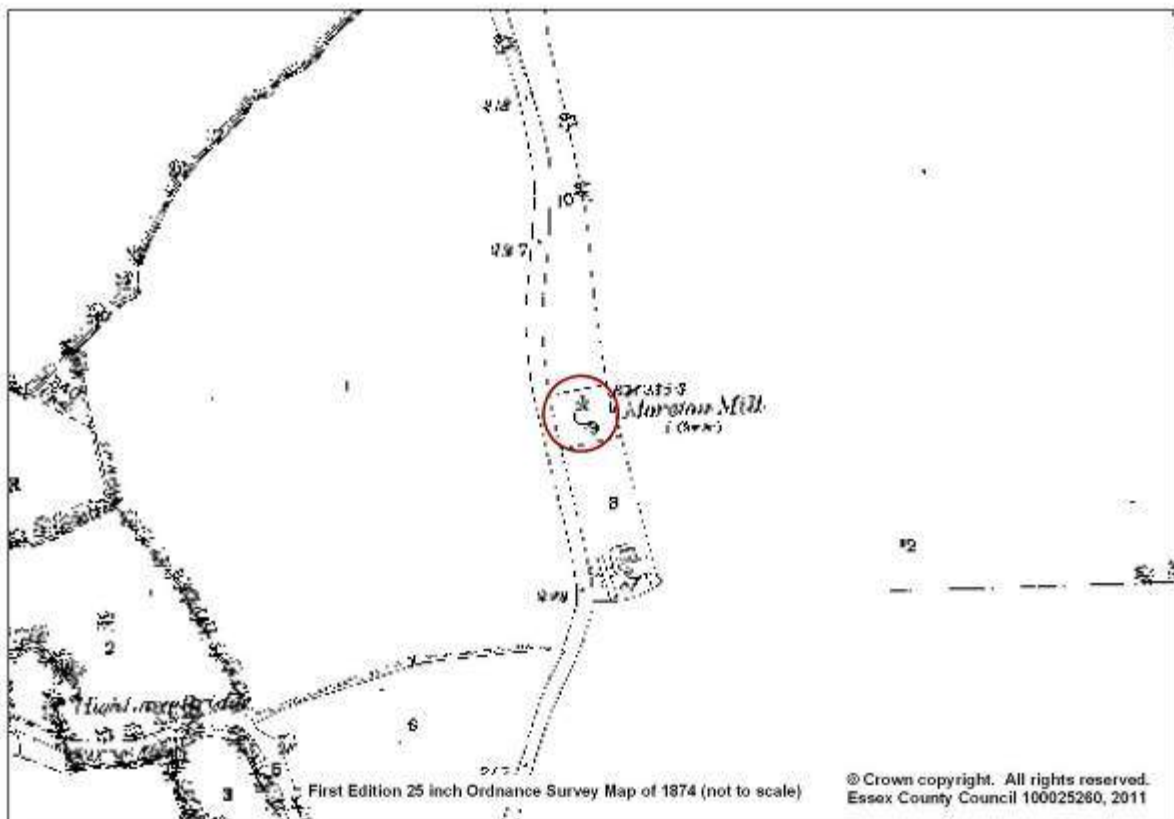
SITE SIGNIFICANCE

None.

RECOMMENDED ACTION None.

MANAGEMENT None.

GRADING 0



SITE NAME Throws Mill Roundhouse

PARISH Little Dunmow

DISTRICT Uttlesford

NGR TL656224

EHER 36768
EHUID

CURRENT STATUS **Con. Area No** **Listed** Grade II **EBAR** No

STATUTORY LIST DESCRIPTION

TL 62 SE LT. DUNMOW BRAINTREE ROAD
4/251 Round House

- II

House, C19, octagonal, brick built with octagonal grey slate roof. 3 storeys with outer staircase, small paned casements. Steps lead up to C20 door with gabled porch. 2 red brick chimney stacks. Local landmark.

Listing NGR: TL6557422391

KENNETH FARRIES SURVEY

Post mill. Known as Throws Mill. The base remains, converted into a cottage, and stands on the north side of the Braintree road (A120) opposite the turning to Little Dunmow village. TL656224

Throws Mill was one of the rarities which post-dated the first O.S. 6in. map, surveyed for this area in 1875. It was erected at or just after that date, having been brought here from High Wych, near Sawbridgeworth....In 1913 Hastings Worrin reported that Throws Mill had been pulled down, and retailed the tradition that the principal timbers had been cut from one large oak tree at High Wych. It would appear that Robert Hasler, the founder of the corn and seed firm still operating in Great Dunmow, had the mill set up c.1875, rejecting the old oak windshaft, iron poll end, elm brake and tail wheels with iron segments, four sails, and other items from the dismembered mill...the rebuilt mill was much modernised and partook of Suffolk attributes. There was a tall octagonal roundhouse with ample storage room, and two pairs of underdriven stones in the head with predominantly iron gearing – wood being limited to the cogs of the brake wheel and probably the stone nuts. One governor controlled both sets of stones.

JOHN BOOKERS SURVEY

Not included

Present Use: Part of house premises

Condition: Unknown

ERO SOURCES:

SITE BACKGROUND:

Listed as significant mill remains in Wood 2005. On private property but can be seen from public roads or footpaths. Adjacent to old A120.

Field Survey 2011

The site is on private property and was not accessible at the time of the survey, however it can be seen on google maps.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Roundhouse	C19	Brick	L

ARCHAEOLOGICAL POTENTIAL

If Farries was correct, then the original windmill was demolished and rebuilt. Only the base of the octagonal roundhouse remains, and has been converted into a cottage. It is not thought that any original fixtures or fitting survive.

SITE SIGNIFICANCE

Given that the roundhouse has been converted into residential accommodation, it is not thought that anything of significance survives. The site has some historic association with the listed building.

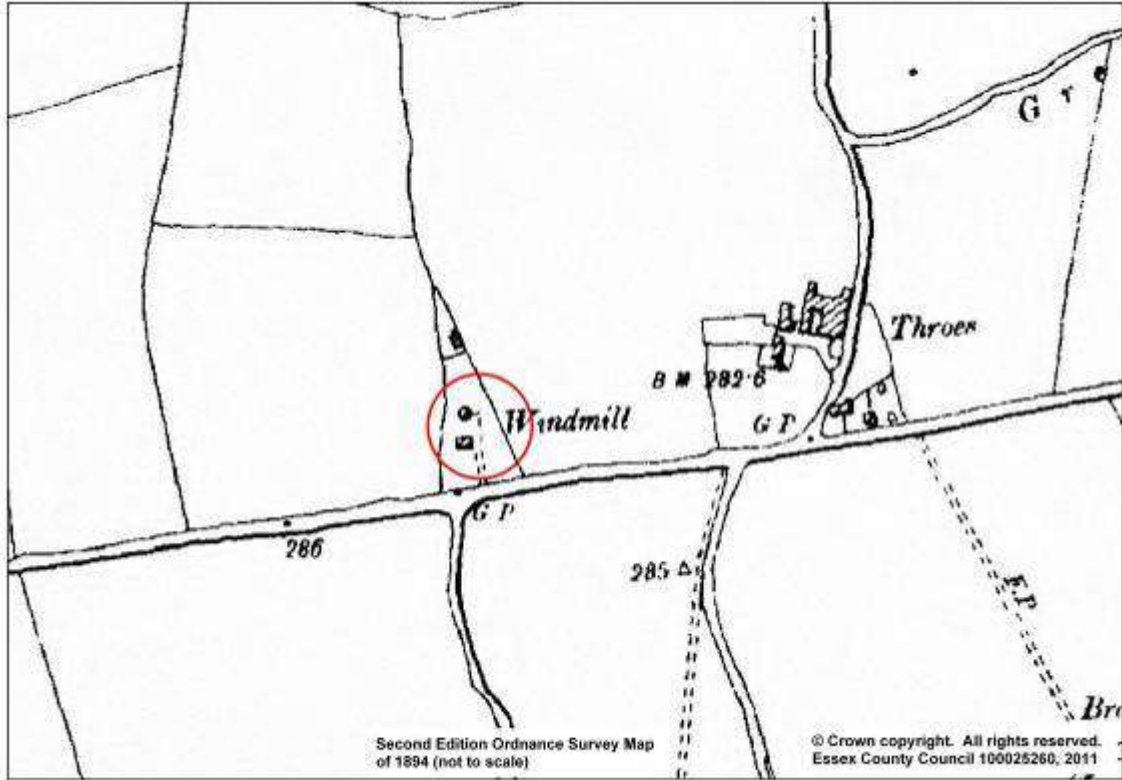
RECOMMENDED ACTION The site may warrant inclusion on a local list depending on local criteria. Listed building description should be updated.

MANAGEMENT Throws Mill Roundhouse is currently in private ownership, occupied and well maintained. Should the opportunity arise an internal inspection of the mill is recommended to assess internal spatial configurations and survival of technologies fixtures and fittings.

GRADING *



Photograph of Throws Mill Roundhouse (Google Maps Street view, retrieved on August 2011)



Smock Mills and Bases

SITE NAME Lindsell Smock Mill

PARISH Lindsell

DISTRICT Uttlesford

NGR TL640276

EHER 1323

CURRENT STATUS Con. Area No Listed Grade NL EBAR

STATUTORY LIST DESCRIPTION

This building is not listed.

KENNETH FARRIES SURVEY

Smock mill, in succession to a post mill. Stood on a mound on the west side of the lane to Holder's Green and immediately west of Mill House.

JOHN BOOKERS SURVEY

Not included

Present Use: Possible survival of smock windmill cap in garden of house; recorded in 1978

Condition: Not known

ERO SOURCES:

SITE BACKGROUND:

Field **Survey** **2011**
28/02/2011

The site was not visited as the records show just the remains of a windmill cap. However, examination of aerial pictures reveals the presence of a feature south west of the house. Appears to be approximately right size for a smock mill base and have octagonal sides. This may be the base of the mill itself which is shown in this location on the O.S. 25 in. First Edition of 1874.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Smock mill cap	C19		L

ARCHAEOLOGICAL POTENTIAL

The site has been demolished, only below ground footings survive.

SITE SIGNIFICANCE

Low, given that the site has been demolished.

RECOMMENDED ACTION

None

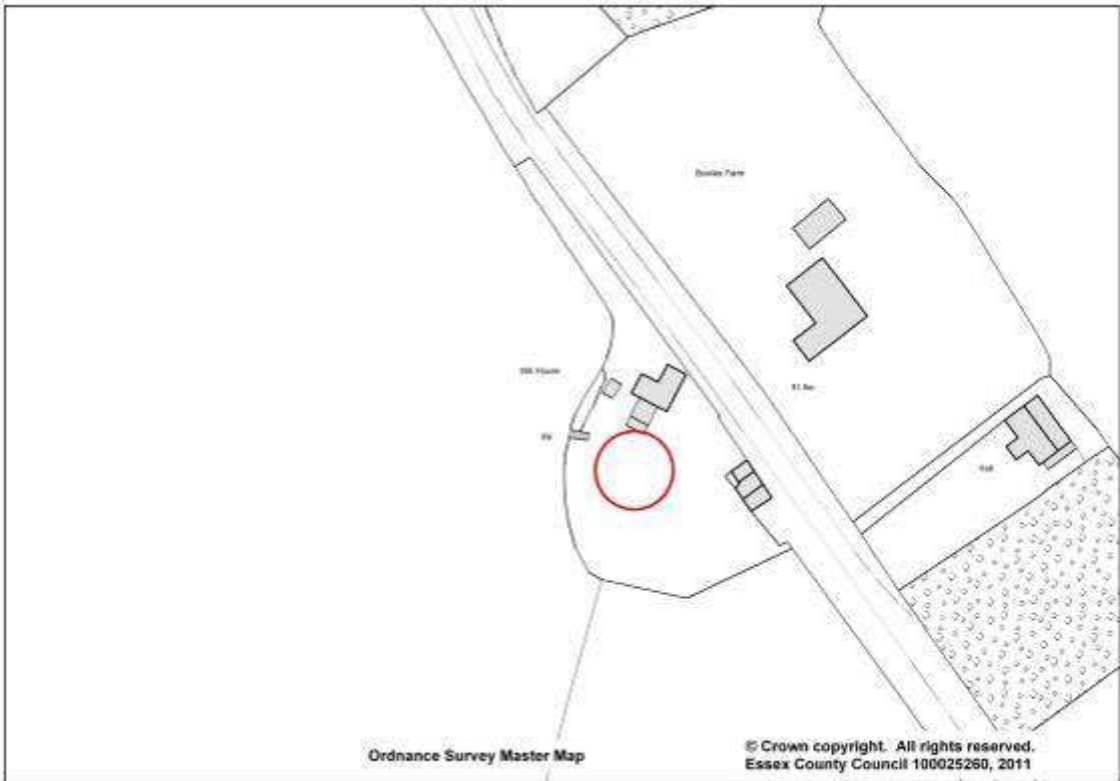
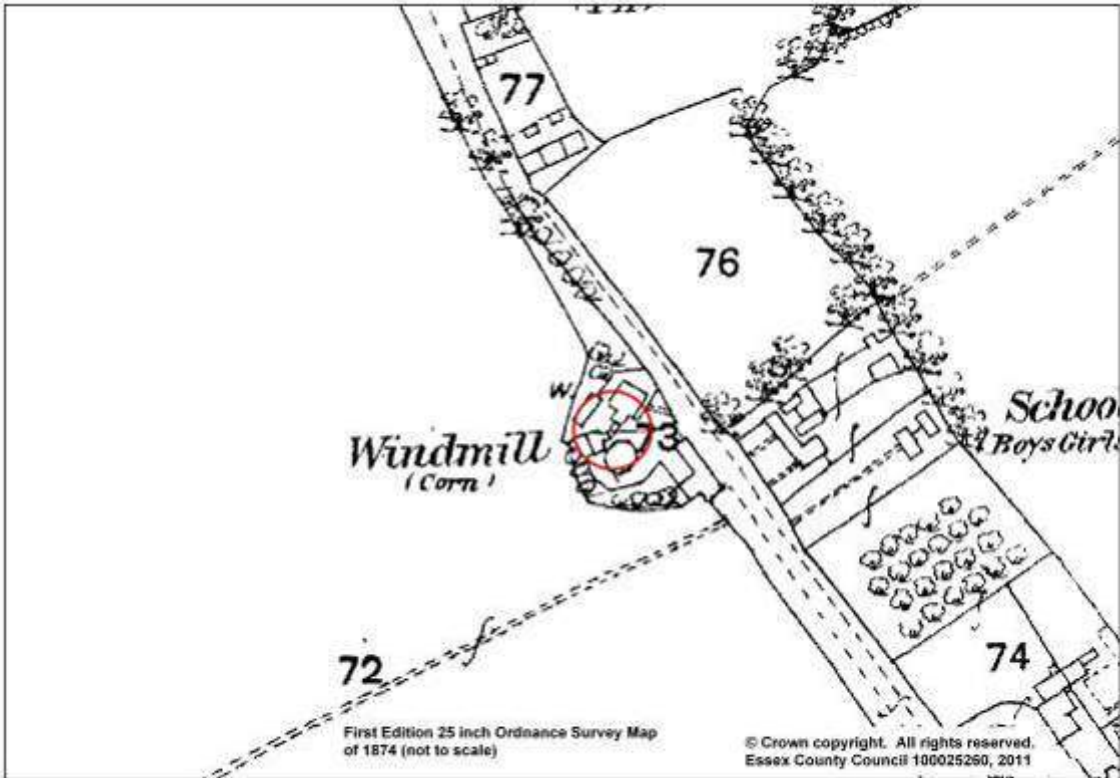
MANAGEMENT

None

GRADING 0



Photograph of Lindsell Smock Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Wimbish Tye Green Smock Mill Base

PARISH Henham

DISTRICT Uttlesford

NGR TL590353

EHER 251

CURRENT STATUS Con. Area No

Listed Grade NL

EBAR No

STATUTORY LIST DESCRIPTION

This building is not listed.

KENNETH FARRIES SURVEY

Smock mill, succeeding an earlier mill. Base survives at Tye Green 1000 yards east of the Thaxted road from Saffron Walden (B184) on the north side of Mill Road (Left fork at Howlett End)... The site is given a mill symbol by Chapman and Andre (1777) ...In 1757 Charles Wymondesold ...leased for 99 years to William Butcher ...a piece of ground described as 'Mill-hill' Butcher having lately erected a windmill upon it at his own cost...The mill does not feature as such on the Popular edition of the O.S. 1in map (surv. 1914-15) and several local informants have stated that it was taken down to the brick base in 1912 after having last worked by wind in 1912....Unusually, the eight corners of the base, all vertical, were strengthened externally by brick buttresses. These remain today to support the converted base made suitable for habitation.

JOHN

BOOKERS

SURVEY

07/09/1973

Brickbase of former smock windmill. This building is not immediately recognisable for what it was. Although the basic red-brick design of the lower part of a smock mill can still be noticed, there have been additions and alterations, notably the attractive domed top, and the whole is masked by trees which disguise the importance from the road. Illustration of c.1880 shows that this mill had no gallery and a series of buttresses around the base.

Present Use: Converted to a dwelling

Condition: Good

ERO SOURCES:

SITE BACKGROUND:

Field Survey 2011

SURVEY

BY

TERRY

WARD

05/2011

The base of the smock mill is now visible from the road, and retains the shape of the former post mill base. Presumed to be externally intact at ground floor level.

SITE COMPONENTS

Term

Period

Material

Importance (H/M/L)

Smock mill base

C19

Brick tile

H

ARCHAEOLOGICAL POTENTIAL

Low given its very poor survival.

SITE SIGNIFICANCE

Given that the site has been converted and partially demolished, the significance of the windmill base is relatively low.

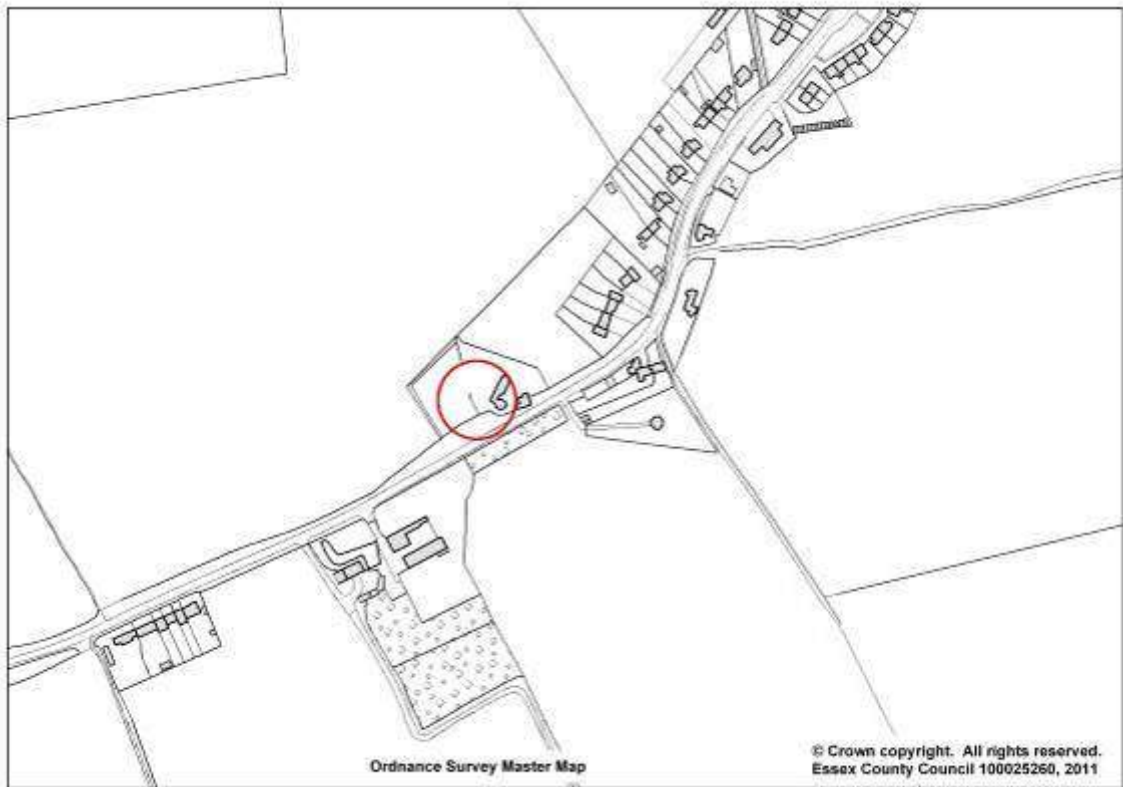
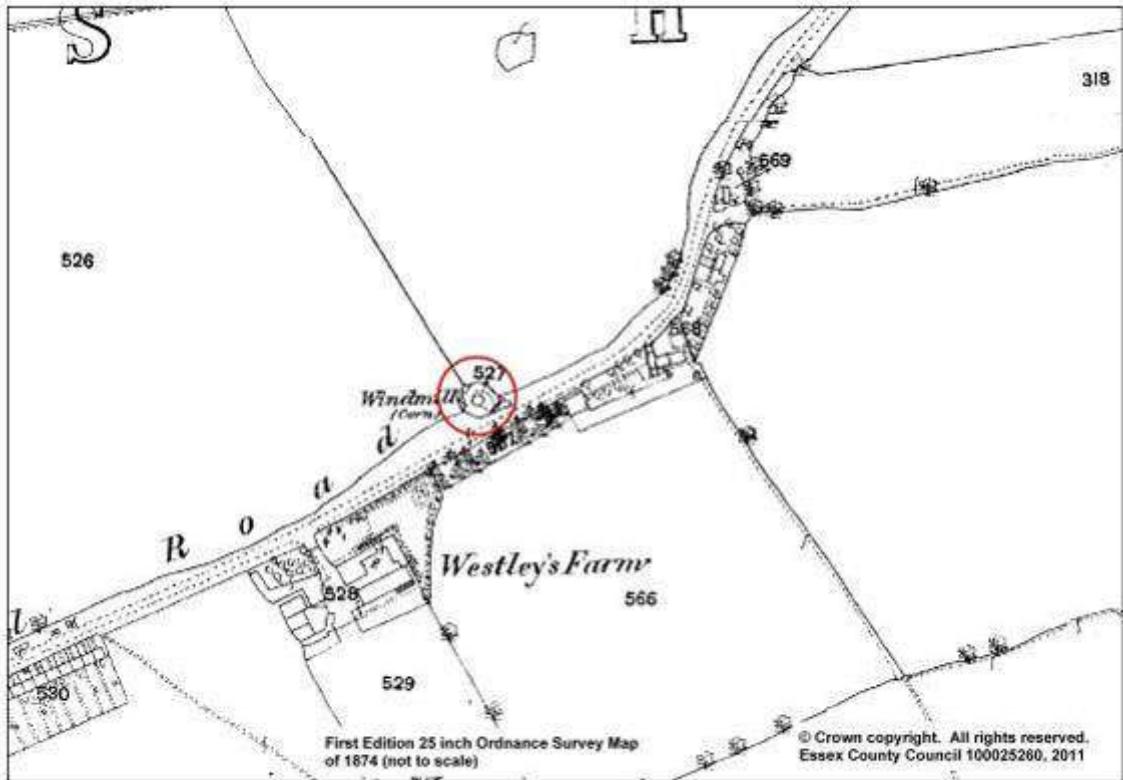
RECOMMENDED ACTION The building may warrant inclusion on a local list, depending on local criteria.

MANAGEMENT If under threat of demolition, the building should be inspected internally and a photographic record should be made of any surviving features.

GRADING *



Photograph of Wimbish Tye Green Smock Mill Base



Tower Mills

SITE NAME Clavering (North) Tower Mill

PARISH Clavering

DISTRICT Uttlesford

NGR TL 467328

EHER 35729

CURRENT STATUS Con. Area No **Listed** Grade II **EBAR** No

STATUTORY LIST DESCRIPTION

23/06/1952

CLAVERING MILL END

1.

5222

Windmill approximately 180 m to north-east of 'The Mills' and Shop

TL 43 SE 16/156

II

2.

Red brick tower windmill dated 1811. Four storeys, with a domed cap. Now without sails.

Listing NGR: TL4666832807

KENNETH FARRIES SURVEY

Tower mill in similar external condition to (Clavering South). Stands east of the road to Stickling Green at a point 220 yards north of the T-junction. Caption reads "Ceased work 1919. Tower preserved. Note clockwise sails." James Pavitt built the north mill in 1811 – a plaque in the brickwork boldly records the date-... The north mill was altogether larger (than the south) with five floors and single-shuttered clockwise patent sails. The three pairs of stones were overdriven on the second floor, and an engine drive applied to the great spur wheel on the second floor... the south mill worked by wind until the autumn of 1919 and the sails, in bad repair, were removed the following spring. There were two pairs of French burrs and no engine drive. The other mill suffered a similar fate wind-wise but continued to drive three pairs of stones by engine for several more decades. In 1972 both the tower mills and premises were standing empty and awaiting new owners...The two brick towers, with replacement pointed aluminium caps and shorn of all excrescences, were more recognisable as space rockets than as windmills. The north mill and its mill house ere eventually divided between two owners, as at Terling, and the mill became the property of one of the two practising Essex millwrights.

JOHN BOOKERS SURVEY

22/04/1971

Both mills, which are near to each other, have the sails removed and pointed domes in place of the caps. The North Mill has three windows vertically in line and date plaque 1811 between the upper two; both mills are of red brick. The North mill was working until 1955 by oil engine; the walls are 3 ft thick at the base made of clunch cased in brick. The South mill is usually dated to 1757.

Present Use: Residential

Condition: Disused to some extent used as stores.

ERO SOURCES: D/DU 625 1673-20C deeds. North Mill from 1811 onwards; incl. 1849 and elevation in marginal plan 1879.

SITE BACKGROUND:

Built in 1811, the mill has an aluminium cap dating from 1957, but no sails. There were three pairs of stones of which one pair remains, together with some machinery. It is the larger of the two existing Clavering tower mills. There was also a post mill nearby at NGR TL466326, the mound of which remains in the triangle of the road intersection.

Field Survey 2011

28/02/2011

In August 2002, the Essex County millwright undertook a full structural survey of the building. It is understood that the mill is inspected regularly at present and the structure is well-maintained.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick	M
Cap	C20 replacement	Aluminium	L

ARCHAEOLOGICAL POTENTIAL

SITE SIGNIFICANCE

Moderately high significance with group value with adjacent buildings. This is an attractive windmill with some surviving machinery, unfortunately the sails are missing.

RECOMMENDED ACTION Maintain current listing.

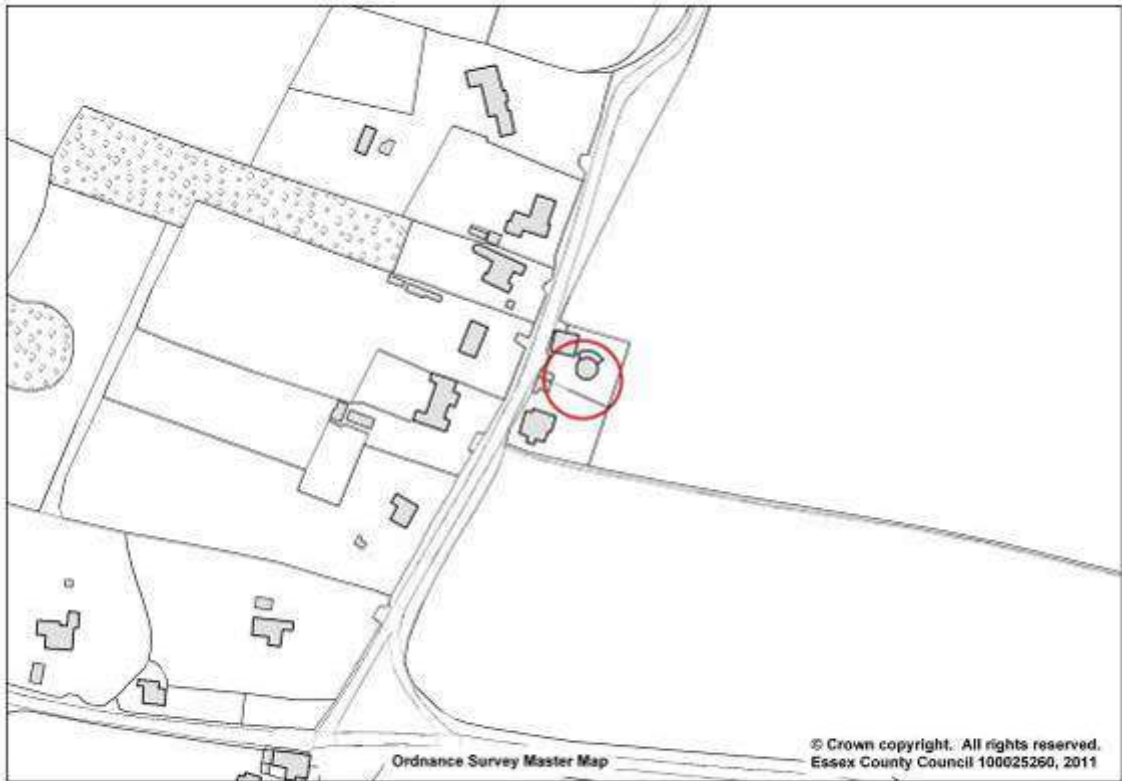
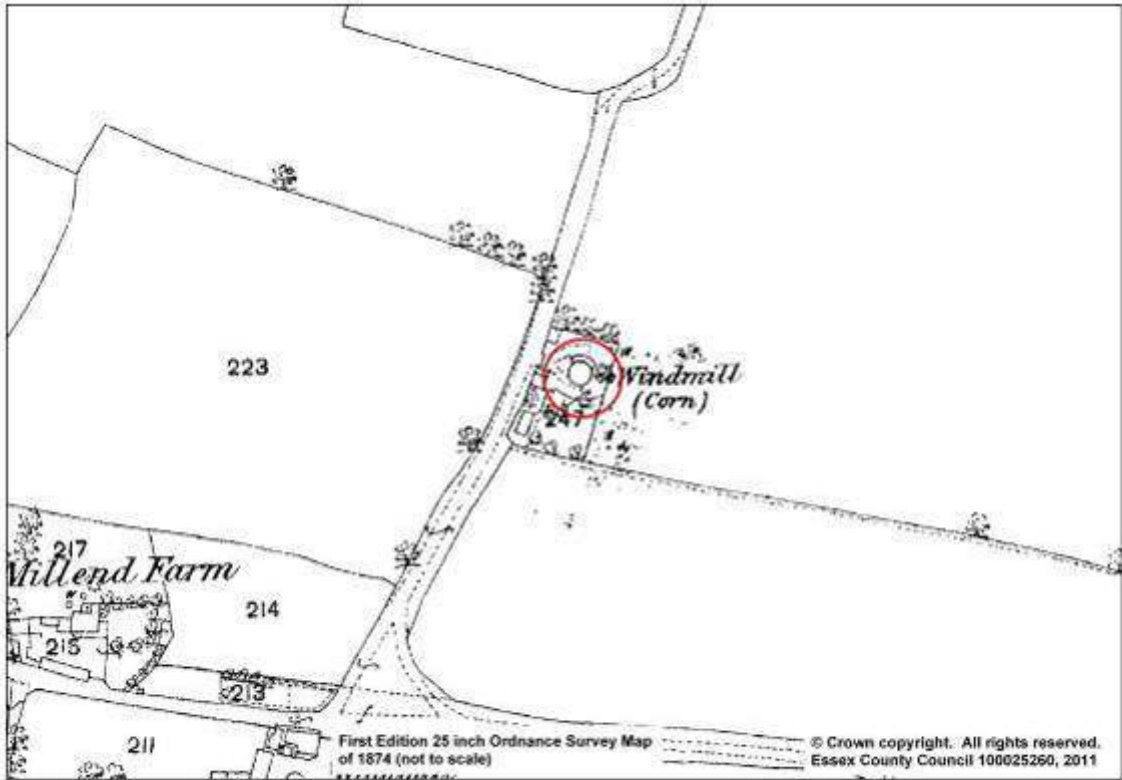
MANAGEMENT

Prior to any significant future construction work to the windmill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mill's original features, should be carried out. A detailed study of the building may also form part of any future consent.

GRADING ***



Photograph of Clavering (North) Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Clavering (South) Tower Mill

PARISH Clavering

DISTRICT Uttlesford

NGR TL 465326

EHER 35727

CURRENT STATUS **Con. Area No** **Listed** Grade II **EBAR** No

STATUTORY
23/06/1952

LIST

DESCRIPTION

CLAVERING MILL END

1.

5222

'The Mills' and Shop

TL 43 SE 16/155

II

2.

C19 stuccoed building with gabled cross wings at the east and west ends. Two storeys.

One:three:one window range of double-hung sashes with glazing bars. The west wing has a shop front on the ground storey. Roofs slate.

Listing NGR: TL4652732636

KENNETH FARRIES SURVEY

Tower mill; the southerly of the pair. The existing brick tower stands off the Langley road a few yards south west of the junction. The south tower mill was built in 1757, according to Donald Smith. It stands on sloping ground with entrance to the mill on two levels: to the basement from the west down a ramp and to the first floor from the opposite side via a short flight of steps. The mill's sails ran anti-clockwise but those of its stouter and junior partner to the north ran in the opposite sense. ...the south tower mill, described in 1802 as 'brick and thatched'...the south mill worked by wind until the autumn of 1919 and the sails, in bad repair, were removed the following spring. There were two pairs of French burrs and no engine drive. The other mill suffered a similar fate wind-wise but continued to drive three pairs of stones by engine for several more decades.

JOHN

BOOKERS

SURVEY

22/04/1971

Both mills, which are near to each other, have the sails removed and pointed domes in place of the caps. The North Mill has three windows vertically in line and date plaque 1811 between the upper two; both mills are of red brick. The North mill was working until 1955 by oil engine; the walls are 3 ft thick at the base made of clunch cased in brick. The South mill is usually dated to 1757.

Present Use: Derelict

Condition: Disused to some extent used as stores.

ERO SOURCES: D/DU 625 1673-20C deeds. North Mill from 1811 onwards; incl. 1849 and elevation in marginal plan 1879.

SITE BACKGROUND:

The South Mill (1757) is older than the northern one and smaller, but of similar appearance. It has an aluminium cap dating from 1957 and no sails. There is no machinery.

Field Survey 2011

22/09/2011

The tower mill, though capped and generally well-preserved externally, is now devoid of its floors and contains no machinery. Some damage to the aluminium cap was noted.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick	H
Cap	C20 replacement	Aluminium	L

ARCHAEOLOGICAL POTENTIAL

Low as no internal machinery or flooring exists.

SITE SIGNIFICANCE

Low significance due to removal of floors and machinery.

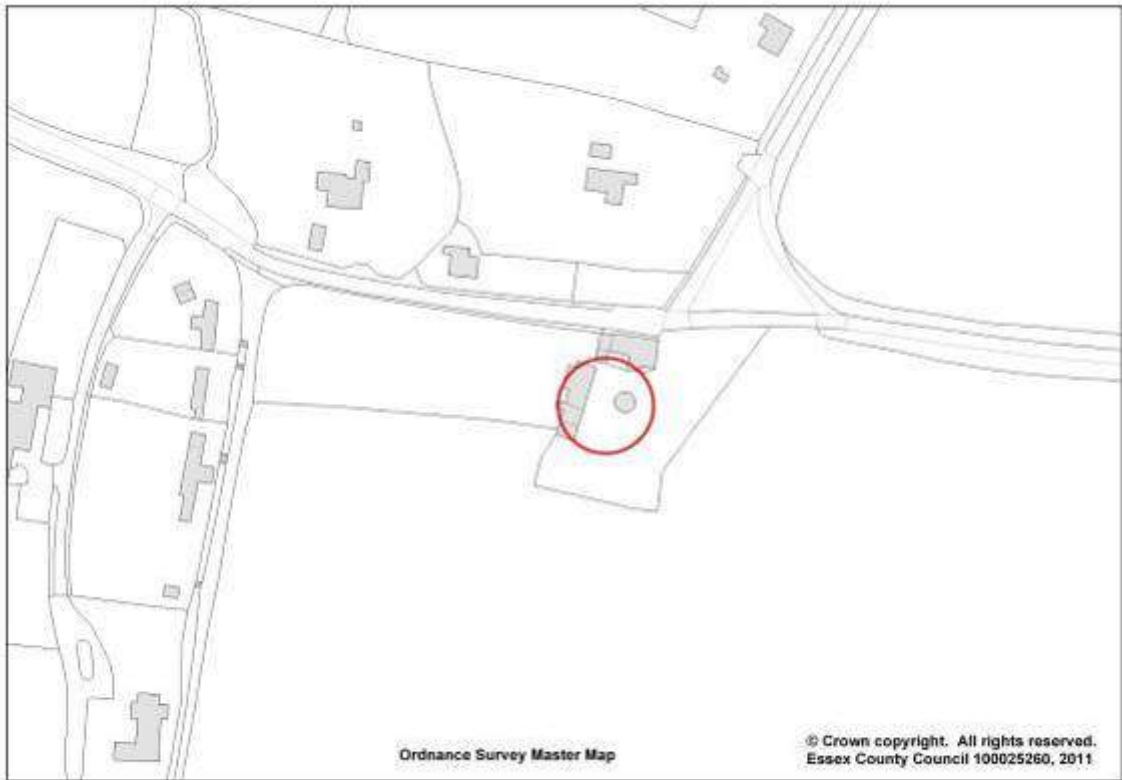
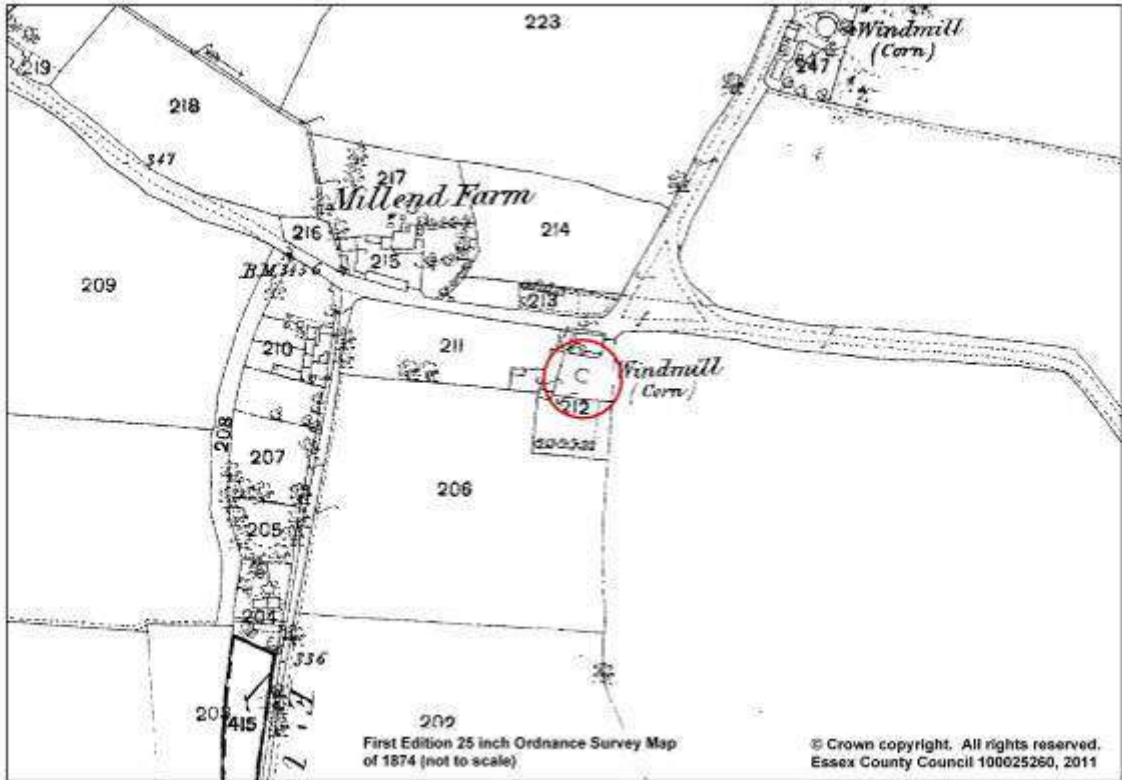
RECOMMENDED ACTION Maintain current listing.

MANAGEMENT Should the windmill become threatened, an internal buildings recording should be made as part of any condition to develop or demolish.

GRADING ***



Photograph of Clavering (South) Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Debden Tower Mill

PARISH Debden

DISTRICT Uttlesford

NGR TL 556336

EHER 177

CURRENT STATUS Con. Area No

Listed Grade II

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

.
DEBDEN MILL ROAD

1.

5222

Mount Hebron (formerly listed as
Debden Windmill under Iyvtodd Hill)
TL 5533 39/185 21.2.67

II

2.

Formerly a circular tower mill now converted into a dwelling house. The red brick circular tower with a pointed cap remains and C20 casement windows have been inserted. A stone, now obscured by the porch has the date 1796 and there are 4 stones inset round the mill bearing the arm of the Chiswell family of Debden Hall.

Listing NGR: TL5558633644

KENNETH FARRIES SURVEY

Tower mill. Preserved as a private residence. Stands opposite the entrance drive to Debden Hall, 90 yards east of the Saffron Walden road...The tower mill...bears the date 1796 and the Chiswell Arms...As in the case of many abandoned tower mills, deterioration was comparatively slow, and in the 1930's the building was used by scouts, following the pattern at Thaxted and Stansted.. By the 1950' the site had become a jungle and the tower little more than a brick shell, but in 1957 was fitted with a dummy cap and converted into a house....In its late working days the mill possessed, unusually for Essex, two pairs of double shuttered patent sails turning clockwise; these were removed in 1911 when the mill stopped work...The mill drove three pairs of stones...There were only three floors over ground level.

JOHN BOOKERS SURVEY

22/04/1971

Apparently working in 1903, sails down by 1931, headquarters of Debden Boy Scouts in 1932, a shell in 1955, and house by 1964. Over the main door is a stone with the date 1796 and on the four sides of the mill are inset stones bearing the arms and devices of the Chiswell family associated with the hall. The mill is red brick with a domed cap (no sails, fantail or galleries) like the mills at Clavering, and is approached by a drive from a roadway through trees. No interior equipment. Built in a decade of great reconstruction on the Debden estate. When the Hall and associated properties were sold in 1903 the windmill had patent sails and three pairs of French stones.

Present Use: Residential

Condition: Fair

ERO SOURCES: D/DU 625 1673-20C deeds. North Mill from 1811 onwards; incl. 1849 and elevation in marginal plan 1879.

SITE BACKGROUND:

One of the few mills in Essex to bear a coat of arms, Debden Mill was an estate mill constructed in 1796 by the Chiswell family, the owners of Debden Hall. It was run in parallel

with a post mill by William Thurgood who in 1796 insured both mills. The mill eventually stopped work in 1911. However, by the 1950's it was no more than a brick shell and in 1957 was fitted with a dummy cap before conversion into a house. It has no sails or machinery.

Field Survey 2011

28/02/2011

A private dwelling maintained in good condition externally. Little of this mill can be seen from the public road.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick	H
Cap	C20	Aluminium	L

ARCHAEOLOGICAL POTENTIAL

Conversion to residential and the removal of machinery means that the archaeological potential is low.

SITE SIGNIFICANCE

Given the removal of machinery and conversion to residential, the significance is relatively low.

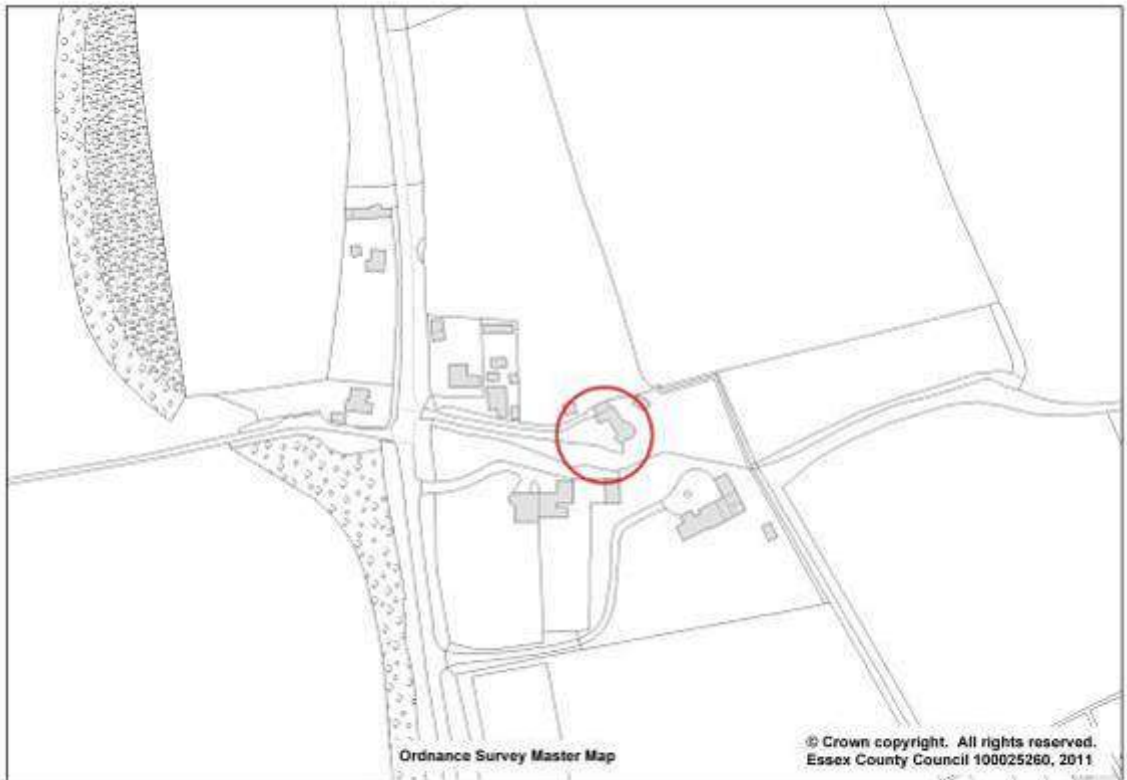
RECOMMENDED ACTION Maintain current listing

MANAGEMENT The mill is used as a residential property and is well cared for. Should any application be made to demolish or alter the mill significantly, a full building recording should be made

GRADING **



Photograph of Debden Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Great Dunmow Tower Mill

PARISH Great Dunmow

DISTRICT Uttlesford

NGR TL6337522523

EHER 37772

CURRENT STATUS **Con. Area No** **Listed Grade II** **EBAR No**

STATUTORY LIST DESCRIPTION

23/06/1952

TL 6322 GREAT DUNMOW ST. EDMUND'S LANE 7/104

Tower House

II

Tower windmill and Mill House, now all a dwelling. Built 1822, in red brick, with domed cap. 5 storeys to tower, and 2 storeys to main house. 3 window range casements and vertical sliding sashes. Grey slate hipped roofs.

Listing NGR: TL6337522523

353407

KENNETH FARRIES SURVEY

The brick tower was built in 1822 for John Fuller by William Redington. In June 1887...it was described as the brick built tower windmill 'which contains round house and flour floors over, and two pairs of French stones'. ...There was also a steam-driven pair of stones....After 1894 the windmill probably did little work, and by 1907 had been converted into a part residence or studio. A Latin inscription was placed over the exterior, THELEMA QUI NON LABORAT NON MANDUCET (he who does not work, shall not eat). The brick tower was fitted with a new aluminium cap in 1974, one of four windmills to be recapped in the early 1970's.

JOHN BOOKERS SURVEY

10/06/1970

Former tower windmill known, with surrounding property, as Tower House. Basically a conventional brick tower converted to domestic purposes, and without sales or cap. There are three floors. The date over the door is 1822 which enables the structure to be positively identified with the work of the millwright Wm. Redington. The tower was converted to its present use at least as early as 1931 at which date it had a domed cap. No remaining machinery. Survey and estimate, 1822, by Wm. Redington for completing a tower windmill (D/DU 293/136-141) the specification (involving cast iron cogs and bevel pinions, cast rings and wheels for the curb, and cast iron bridging boxes to stones and spindles) suggests building a new tower from old material, but if there was an earlier mill on the site it was not there in 1777.

Present Use: Part of private residence

Condition: Mortar reputed to be weak

ERO SOURCES: D/DU 625 1673-20C deeds. North Mill from 1811 onwards; incl. 1849 and elevation in marginal plan 1879.

SITE BACKGROUND:

Built in 1822, a smock-mill frame and machinery providing materials. John Fuller, the original owner, let the property out but it was eventually sold in 1887, being described confusingly as a brick-built tower windmill 'which contains round house and flour floors over, and two pairs of French stones.' In addition it contained a steam-driver stone set but little work was done after 1894 and it had become a residence or studio by 1907. Although nicely capped in aluminium in 1974, it has no sails or machinery.

Field Survey 2011

28/02/2011

The building is on private land; however it appears to be in a well-maintained condition externally.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick	M

ARCHAEOLOGICAL POTENTIAL

Low.

SITE SIGNIFICANCE

Internal features and machinery are not thought to survive, so the significance is probably low.

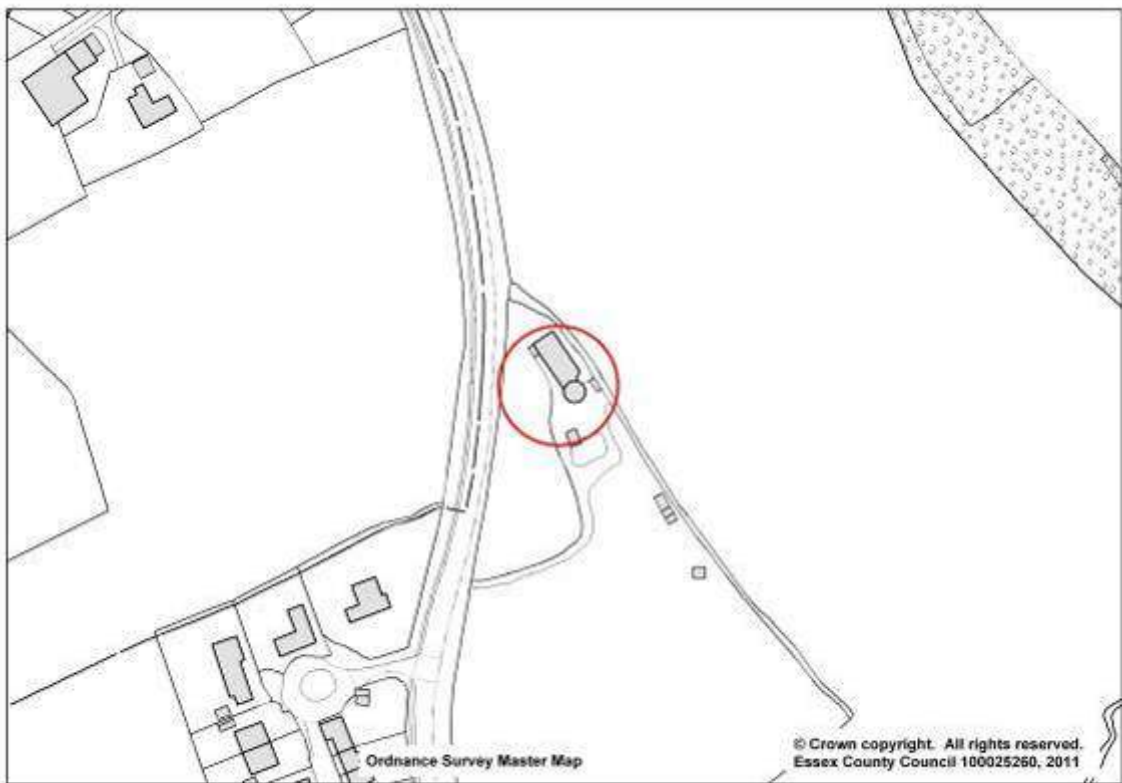
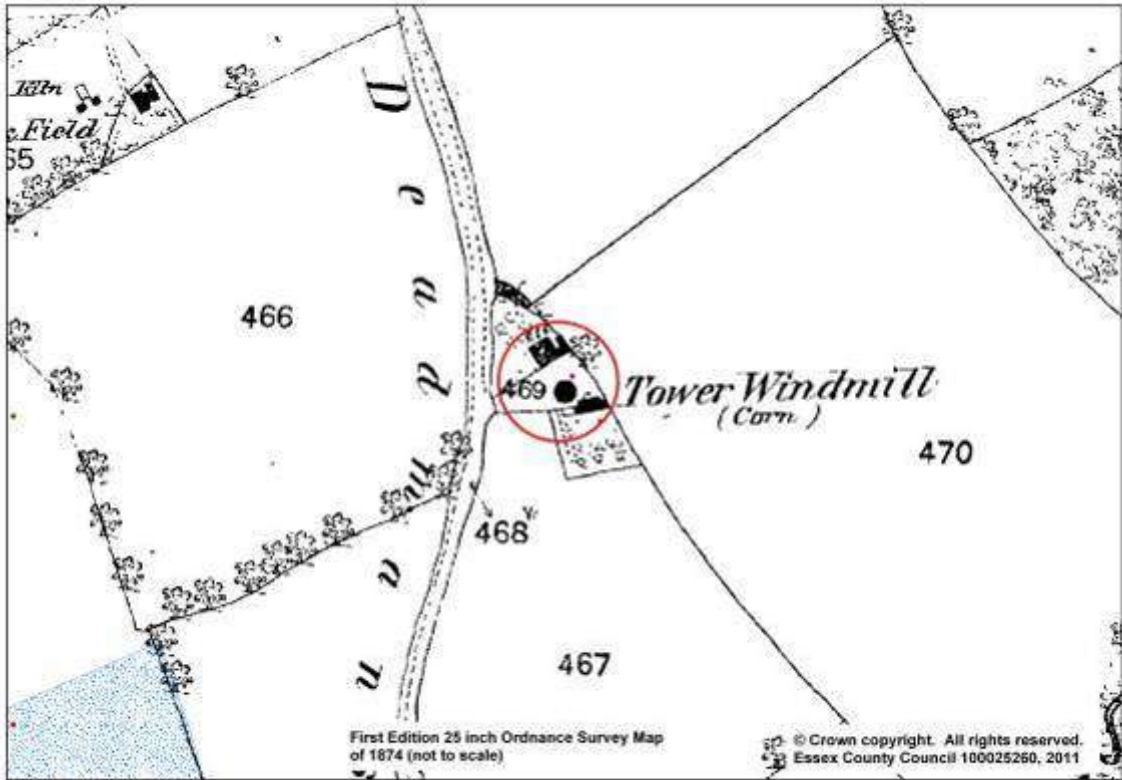
RECOMMENDED ACTION Maintain current listing.

MANAGEMENT Undertake an internal survey if possible, and the buildings should be recorded in advance of any demolition or conversion works.

GRADING **



Photograph of Great Dunmow Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Stansted Tower Mill

PARISH Stansted Mountfitchet

DISTRICT Uttlesford

NGR TL 509247

EHER 36559

CURRENT STATUS **Con. Area** Yes **Listed** Grade II* and **EBAR** No
Scheduled Monument

STATUTORY
23/06/1952

LIST

DESCRIPTION

STANSTED MOUNTFITCHET MILL SIDE

1.

5222

Windmill

TL 5024 47/712 26.11.51

II* GV

2.

Red brick round tower mill built in 1787 for Joseph Linsell (the date is scratched on a brick). It was last worked as a mill in 1910. In 1929 it was bought and restored by Lord Blyth. The wood cap was rebuilt but the shutters were not restored to the sails. A unique feature of the cap is an oval shutter with a ladder beneath it for use when the cap is painted. The mill is of 5 storeys, with 3 raised bands around the tower. The mill is now used as a Boy Scout centre and is in good repair. AM.

Listing NGR: TL5097524744

413238

Scheduled Ancient Monument EX99

KENNETH FARRIES SURVEY

Tower mill. Preserved. Stands about 70 yards east of the main road (B1383) on the north side of the narrow turning, Mill Lane, 350 yards south of Stansted crossroads...The mill was built in 1787 for Joseph Linsell, and was worked until 1910...A sale notice of 1807 describes the windmill at Stansted as having 6 floors, and it was little doubt built in 1787 to the considerable height of over 57 ft. as seen today. The stones were at first on the second floor down, and a stage was set around the mill at the level of the floor below, now the stone floor. The mill today by the robust nature of its construction and by its advantageous situation amid an appreciative community, has found willing contributors towards its upkeep and the practical demands of its exhibition to the public...

JOHN BOOKERS SURVEY

29/07/1972

This is one of the few preserved windmills in the county which was not restored by the County Council. The mill has unusually good documentation from an early date and was built by Joseph Linsell in 1787 – a date confirmed by an inscribed brick at the base of the tower. The mill has full machinery and has a lucky history since it went out of use in 1910. Through the efforts of Lord Blyth and the SPAB it was restored by Hunt. Bros. Soham, Cambs in 1930; Lord Blyth gave the mill to parishioners of Stansted on whose initiative it was again fully restored in 1966.

Present Use: Preserved

Condition: Very good

ERO SOURCES:

SITE BACKGROUND:

This tall slender tower mill was built in 1787 when it was equipped with common sails set from a stage. The later patent sails were adjusted by an external 'Y' wheel operated from the ground by a long endless chain, the system also originally used at Stock. Much restoration work has been done over the years, especially in 1966, again in the mid-eighties when the sails were replaced and in the mid-nineties with repairs to the cap. Most of the original machinery remains including a bolter and three pairs of stones.

Field Survey 2011

28/02/2011

Work has recently been undertaken on the mill by the current Essex millwright and inspections are regularly undertaken.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C18	Wood, brick, iron	H
Sails	C19	Wood, iron	H
Machinery	C18, C19	Wood, iron	H

ARCHAEOLOGICAL POTENTIAL

High, most of the internal machinery survives and the windmill is kept in good condition.

SITE SIGNIFICANCE

High, the windmill is well cared for and is in very good condition.

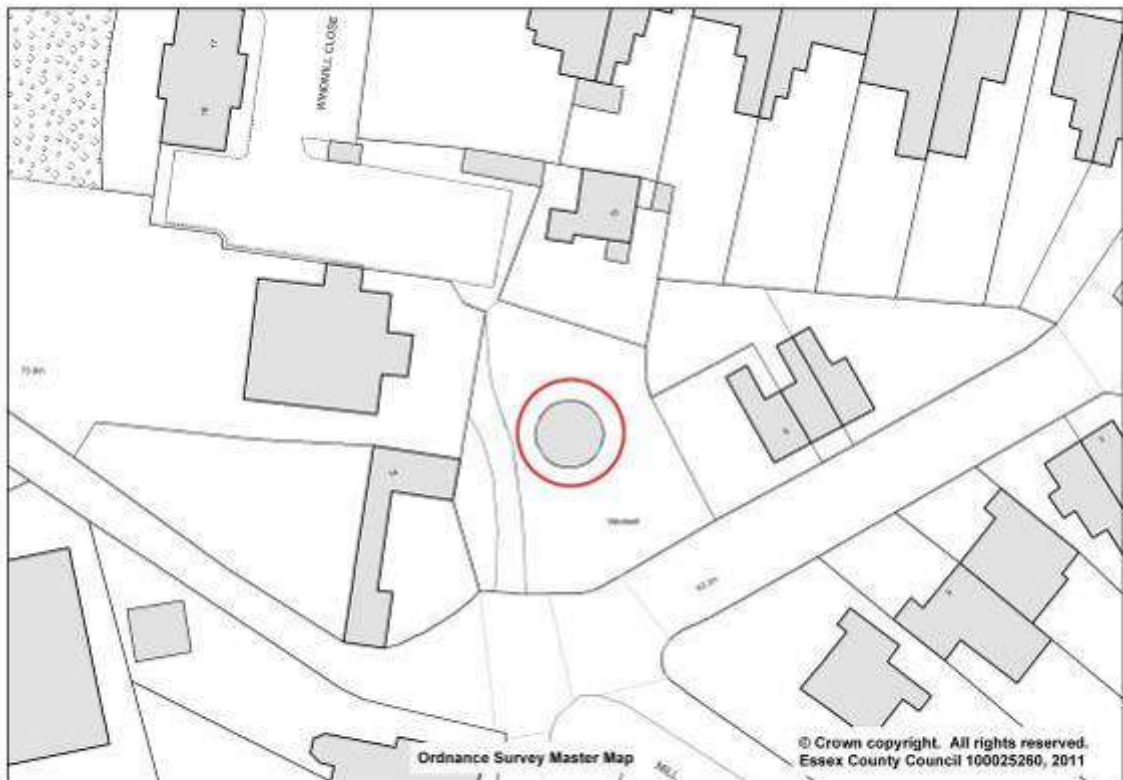
RECOMMENDED ACTION Maintain current listing, but remove Scheduled status.

MANAGEMENT The windmill is currently well maintained and cared for. Prior to any significant future construction work to the mill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ****



Photograph of Stansted Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME Thaxted Tower Mill

PARISH Thaxted

DISTRICT Uttlesford

NGR TL 609308

EHER 1411
EHUID

CURRENT STATUS Con. Area Yes

Listed Grade II*

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

1.
THAXTED

Windmill

TL63SW:5/1667.2.52

II*
2.

Red brick tower mill, built in 1804 for Mr John Webb. Now fully restored, with sails and machinery. Stands in a commanding position, SW of the Church and is one of the features of the town.

Listing NGR: TL6096630820

KENNETH FARRIES SURVEY

Tower mill. Lowe's Mill. Stands in restored condition 200 yards south west of the church. ..The ace of Thaxted's windmills is said to have been composed of locally won or fabricated materials: timber from the Park and Borough farms and bricks prepared close by. It was commissioned by John Webb in 1804, as an inscription on the mill exterior testifies, and the stones ran dry at the last around 1910...Formerly the mill had a stage at first-floor level ...but the stage has vanished and the doorways are bricked up. The exterior of the tower above carries decorative lozenge patterns made with individual bricks, but they are not readily apparent....The mill stood unattended for more than twenty years until the Thaxted Civic Trust did essential repairs, making lower floors available to scouts and youth groups, and waterproofing the cap. From the Trust the mill passed to the parish council in the mid-1950s, since when the Thaxted Society, formed in 1964, have taken strenuous action to restore the structure. ..The mill stands 54ft. to the top of the cap internally and the inside dimensions of the tower are 24ft at the base and about 15ft. at the curb....All the main heavy components down to the stones have been preserved...

JOHN
10/06/1970

BOOKERS

SURVEY

One of the most attractive settings of any Essex windmill. For many years the mill has been derelict with the brickwork cracking and the sails reduced to the stocks. The restoration work now under way has resulted entirely from the enthusiasm of local inhabitants who suggested, first in 1963 and again in 1970, that the mill should be renovated and took steps to raise the money. The Department of the Environment contributed £900 and Essex County Council £500. The machinery in the mill is perhaps nothing remarkable but the mill has a tremendous contribution to make to both landscape and townscape. Above the door is inscribed J.W.1804, this being believed to stand for John Webb.

Present Use: Under restoration 1971

Condition: Not good but under repair

ERO SOURCES:

SITE BACKGROUND:

John Webb's Mill was built in 1804 at the height of the rising demand for milled products and against a background of rising prices. Webb, a farmer, landowner and innkeeper, exploited this opportunity, building a sturdily proportioned mill using bricks from his own brickworks near the mill. Business flourished under John Webb and later his son (also John) until it became uneconomic towards the end of the C19. By 1904 the mill was disused. Much restoration work has taken place over the last 20 years in 1997 with the restoration of one set of stones completed, the mill ground flour for the first time in 92 years. The final stage of restoration has been the reinstatement of the gallery from which the sails are adjusted. During 2003 and 2004 extensive repairs were carried out to the kerb, necessitating the removal of the cap and sail assembly. One of the sails was damaged during 2010 and is awaiting reinstatement.

Field Survey 2011

21/02/2011

This red brick tower mill is externally complete including the gantry, the only exception being the sails. These were removed in 2010 when one of the stocks broke in a gale and they are awaiting restoration. The stocks are pitch-pine which is an expensive timber and difficult to obtain. Windmill is preserved and receives many visitors. It is set amongst fields on a hill approx a quarter of a mile from the church.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick, iron	H
Sails	C20	Wood, iron	M
Machinery	C19	Wood, iron	H

ARCHAEOLOGICAL POTENTIAL

Moderate, most of the internal machinery has been removed but externally the mill is in very good condition.

SITE SIGNIFICANCE

Moderate. The mill is well maintained and the sails will be reinstated.

RECOMMENDED ACTION

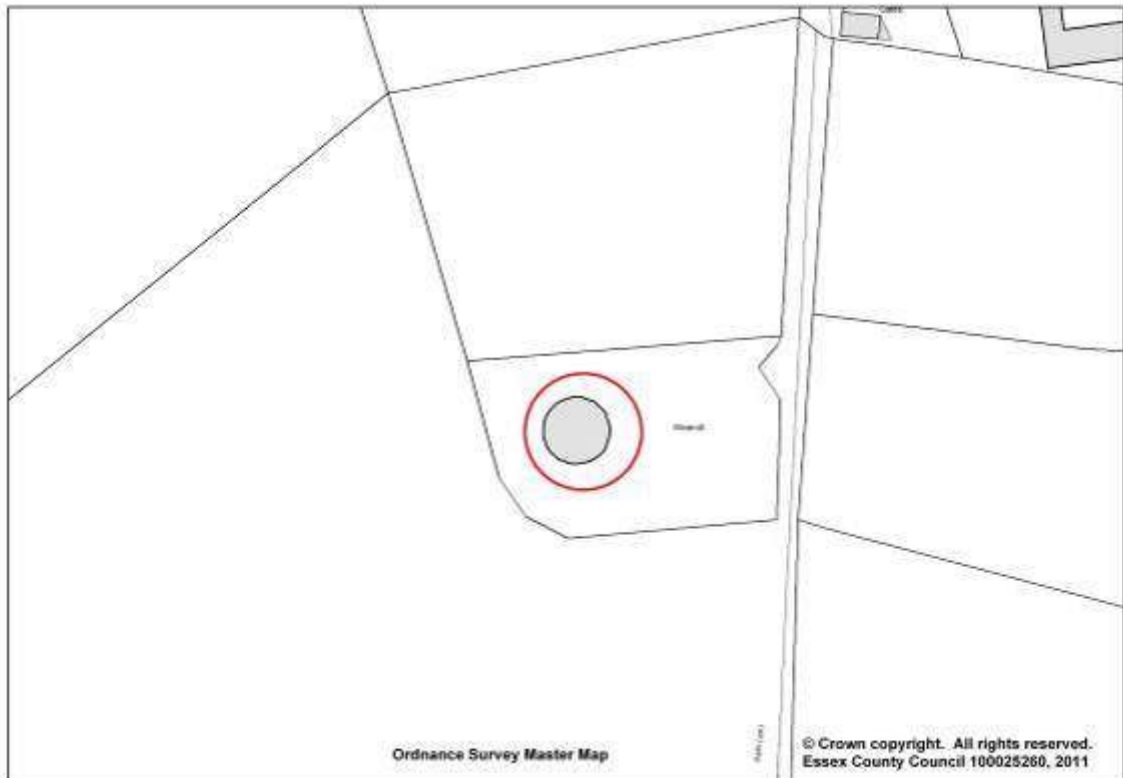
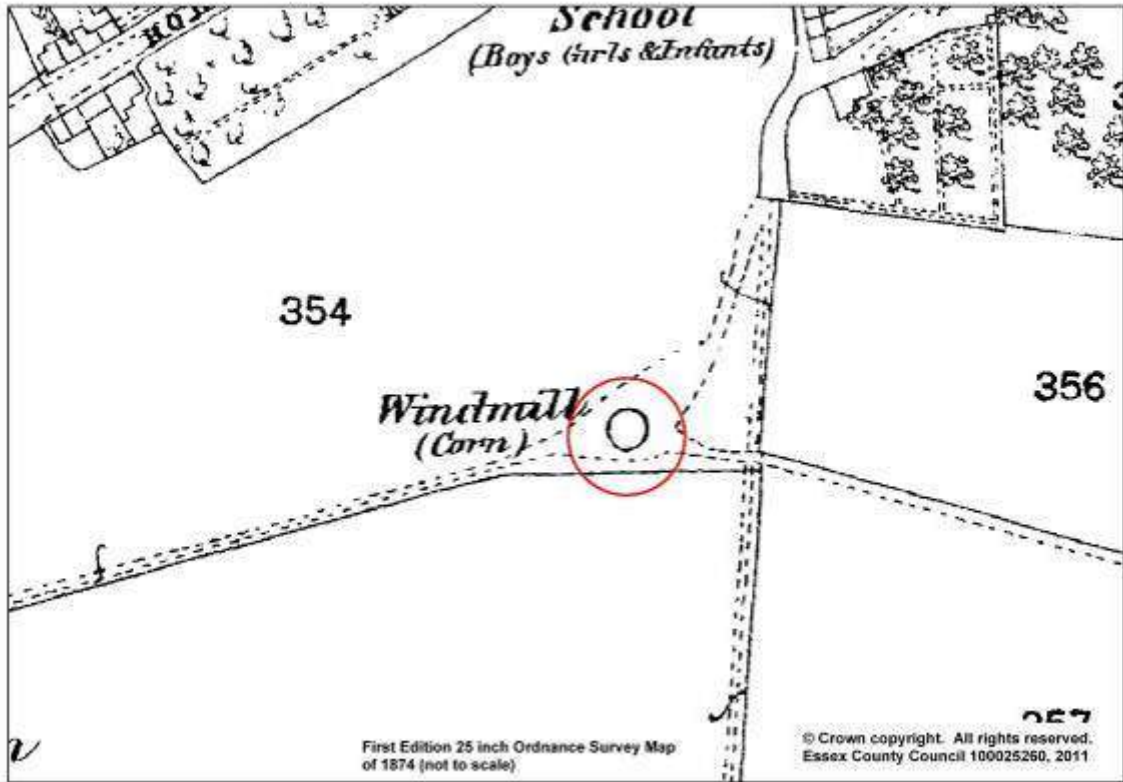
Maintain current listing.

MANAGEMENT Prior to any significant future construction work to the mill an historic building impact assessment, guided by the principle of identifying and preserving as much as possible of the mills original features, should be carried out. A detailed study of the building and its apparatus (at RCHME level 3 or 4) may also form part of any future consent.

GRADING ****



Photograph of Thaxted Tower Mill (Google Maps Street view, retrieved on August 2011)



SITE NAME White Roding Tower Mill

PARISH White Roding

DISTRICT Uttlesford

NGR TL 564131

EHER 4364

CURRENT STATUS Con. Area No

Listed Grade II

EBAR No

STATUTORY LIST DESCRIPTION

23/06/1952

TL51SE WHITE RODING CHURCH ROAD

8/146 Windmill

7.2.52

GV II

Late C19 Tower Windmill of yellow brick with round weatherboard cap and small ball finial. This mill replaced the post mill blown down 1877 and was working until 1931. Said to be the last Windmill built in Essex.

Listing NGR: TL5642813082

KENNETH FARRIES SURVEY

Tower mill, succeeding a post mill. Preserved, and stands directly south of The Mill House on the east side of the road to Abbess Roding 350 yards south of the church. ..The preceding post mill was struck down by a gale on 1st January, 1877...The tower mill was erected with little delay, and the date 1877 appears on a brick over the north door. The whitewashed tower is very well constructed, and stands 42 ft. high, tapering internally from 22.5 ft. at the base to 13.5 ft. at the curb. ..A new cap was fitted in the 1970s by Leonard and Pargeter (Millwrighting) ...restoring a long missing feature and bringing the mill to an overall height of about 50 ft. ..When the mill was examined in 1969, no machinery remained below the windshaft, and in the absence of the cap, sails and fantail, the most interesting features were the curb and the winding gear...iron brake wheel, one of three that have been noted in Essex, is just over 9ft. in diameter. R. Hawksley was informed locally that the machinery was all of iron, and was thought to have been removed shortly after the second world war....Older photographs show an ogee cap in the style of Whitmore, of Suffolk, a 6-bladed fantail...There was no stage, the mill doubtless had an original set of patent sails not requiring constant access.

JOHN BOOKERS SURVEY

03/07/1970

Former tower windmill in private ownership. Described by Wailes 1958 as a shell, but there is machinery within. The cap and sails have gone but the cast iron brake wheel – a rare feature in itself – is clearly visible protruding above the brick tower. Despite an apparent lack of primary sources there is no need to doubt the belief that this was the last tower mill built in Essex and was erected in 1877 by Whitmore & Binyon of Wickham Market on the site of an earlier post mill. There is good visual documentation of the tower mill which is a very much a local landmark.

Present Use: Disused. In August 1970 a new cap is to be fitted.

Condition: Brickwork good

ERO SOURCES:

SITE BACKGROUND:

This was the last corn mill to be built in Essex. It was constructed in white brick in 1877 on a sixteenth century site. A typical Whitmore & Binyon structure, it carried an ogee cap and finial and was a Suffolk design. It worked until 1926 and in 1937 was bought by the actor Michael Redgrave who sold it in 1946. The milling machinery below the cap consisted entirely of iron, apart from the stones, and was sold shortly after WW2. The shell was recapped in the seventies. It has no sails or machinery.

Field **Survey** **2011**
28/02/2011

The tower mill is constructed in white gault brick and is well-maintained externally although requiring some pointing. Internally, the timber floors are still in position but there is no machinery.

SITE COMPONENTS

Term	Period	Material	Importance (H/M/L)
Tower windmill	C19	Wood, brick, iron	H
Cap	C20	Aluminium	L
Machinery	C19	Iron	H

ARCHAEOLOGICAL POTENTIAL

There is no machinery remaining, therefore archaeological potential is low.

SITE SIGNIFICANCE

Low, internal machinery has been removed and the sails are not present.

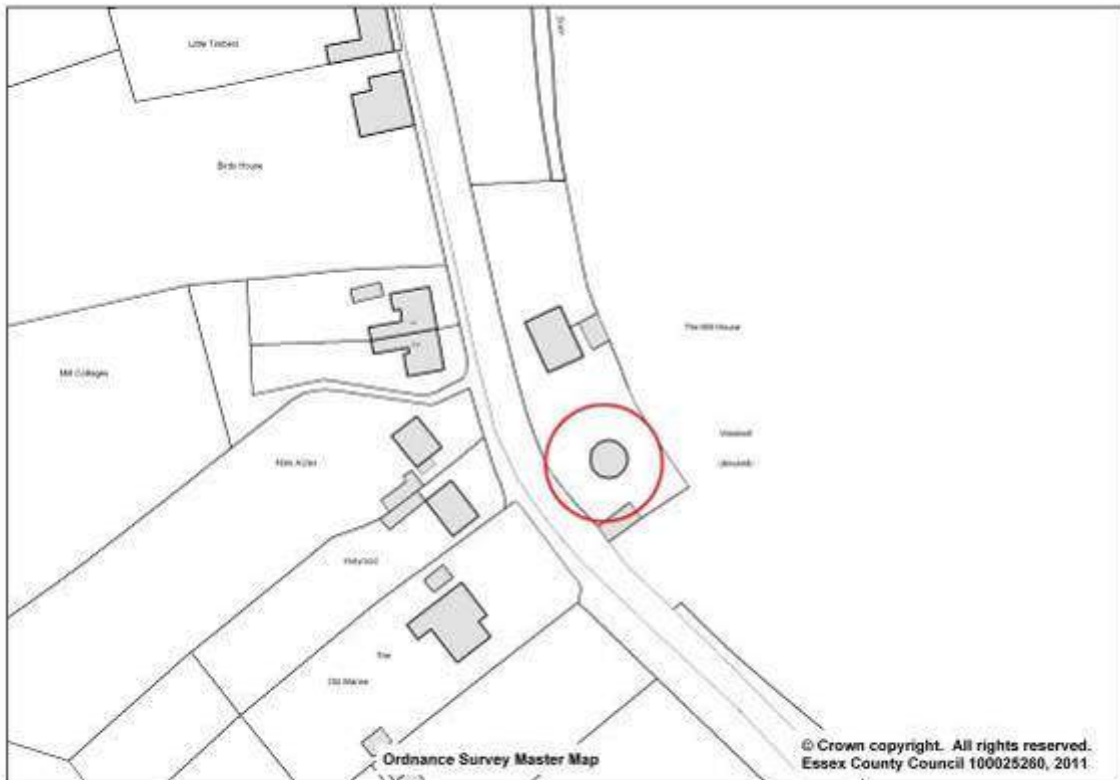
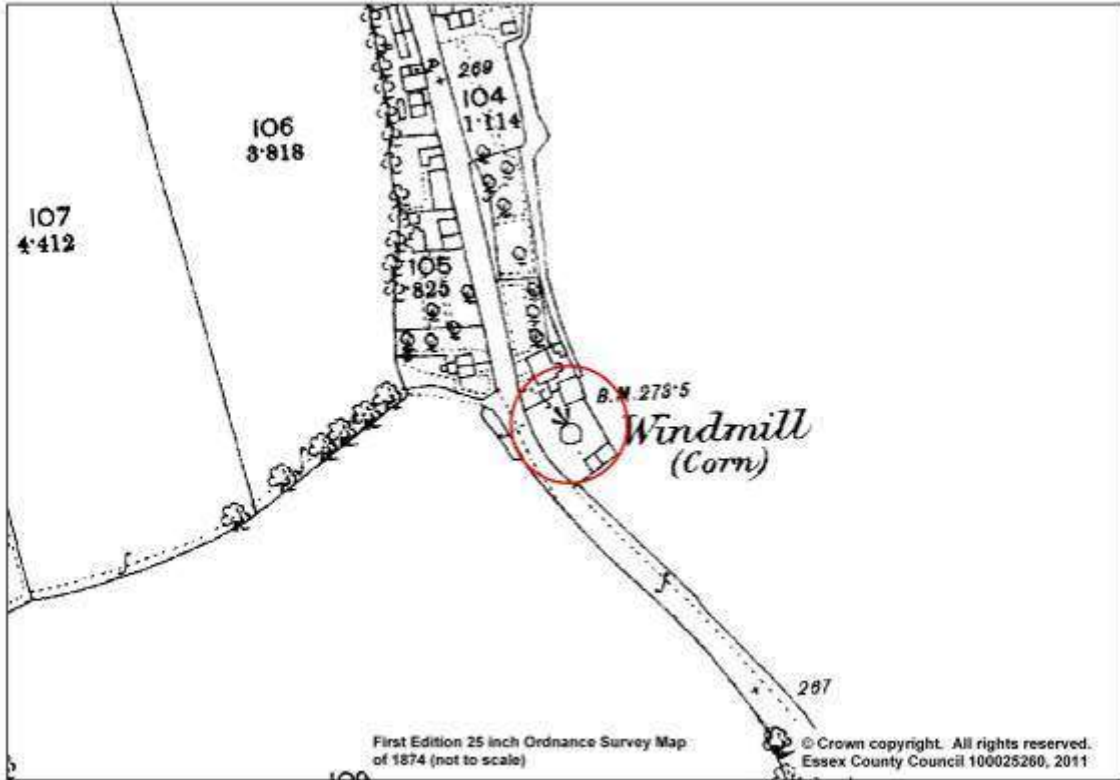
RECOMMENDED ACTION Maintain current listing.

MANAGEMENT Should the opportunity present itself an internal inspection and/or historic building survey is recommended in order to assess and record levels of archaeological/historic and technological survival within the building.

GRADING ***



Photograph of White Roding Tower Mill(Google Maps Street view, retrieved on August 2011)



This report is issued by
Essex County Council Historic Environment Branch
You can contact us in the following ways:

By Post:
Essex County Council
Historic Environment Branch
County Hall
Chelmsford, Essex CM1 1QH

By telephone:
0845 7430 430

By email:
heritage.conservation@essex.gov.uk

Visit our website:
www.essex.gov.uk

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