



1. Background

Meopham Windmill is owned by Kent County Council (KCC). It was built in, or shortly after, 1819 and is a Grade II* listed building.

As well as being one of the most complete examples of its type to survive in the county, Meopham Mill is highly significant as the sole-surviving 'Medway-type' smock mill, with several regionally distinctive design features.

The grounds in which the windmill stands are owned by the Meopham Windmill Trust (MWT). This pleasant grassed space forms part of Meopham Green Conservation Area.

A small building attached to the base of the windmill is used as the parish office by Meopham Parish Council (MPC).

The windmill and parish office are accessible via a gravelled track from the A227. This track also provides vehicle access to two private properties, Orchard House and Killick Mill, to the south west of the windmill site. It is essential that access to these properties is maintained at all times.



The windmill and the site as they currently appear

2. History of the mill

The following notes on the history of the windmill have been compiled from James Carley's 1993 booklet "The Killicks and the Nortons – Millers in Meopham" and from R J Brown's 1976 book "Windmills of England".

Part 1 – The Killicks

The land on which the mill stands once belonged to the Nordish family, whose name first appears in parish registers in 1576. Five and a half acres at Pitfield Green were owned by Henry Nordish in the late 18th century. On his death in December 1800, the land, which included a cottage, was left to John Scudder. Part of this land eventually became the site of the mill.

On 24th June 1819, Scudder sold three quarters of an acre of land to James and Thomas Killick for £125. James was born in 1792, the eldest son of James and Sukey Killick, who were living in Strood. James moved to Meopham in 1819 with his wife Harriett to establish Meopham Windmill.

The land purchase description described the site as: *"All that piece or parcel of land or ground containing by estimate three quarters of an acre, used as a garden or orchard... at Pitfield Green in the parish of Meopham in the county of Kent... somewhat of a triangular shape, and abuts to lands belonging to James Buggs to the north, to the green called Meopham Green on the east, to the road leading from Meopham Church to Trosley on the south and to land of George Smith Esquire to the west."*

An old tale describes the mill as having been built by three brothers who walked over from Strood every day. This may refer to the three eldest of James Killick's eleven children, James Jr, Thomas and John. The hexagonal shape of Meopham mill matches that of the family windmill at Broom Hill, Strood, which continued to be operated by Thomas and John following the death of their father in 1823 and their mother in 1836, while James Jr remained at Meopham.



An early photo of the mill, taken during the Killick family's ownership. The fantail has not yet been fitted, and one pair of sweeps is canvas-covered. (Rob Cumming Collection)

On the death of Sukey Killick, the Meopham operation was valued at £963.15s.0d.. James had to pay ten elevenths of this to his siblings. To do this, he arranged a mortgage of £500 from J. Nightingale, which was repaid in 1874. The valuation would have included the land with the "Wind Corn Mill" as well as various outbuildings, a Mill House, vehicles, probably a horse, and the equipment and goodwill of a business that had by then been established for 15 years.

By 1887, the partners in the business were James, Thomas and Richard Killick. James died on 9th December 1889, aged 97 - a long life which appears to have been devoted to windmilling. His son, also James, inherited the property but died very shortly afterwards, in April 1891. His wife Matilda immediately sold up, ending the family connection with Meopham Mill.

Part 2 – The Nortons

John Norton purchased the mill and land from Mrs Killick on 14th August 1891 for £830. John's brother, Tanner, worked the nearby windmill at West Kingsdown and Tanner's son, William Morgan Norton, was soon brought into the Meopham business. He married Clara Payne and was permitted by John to build the present Orchard House, which stands close to the road. Other parts of the Norton enterprise included a sweet shop and tea rooms which are shown in old postcards.



Meopham Mill, c1905, at work with one pair of common sweeps and one pair of shuttered sweeps. A fantail has now been fitted and the rear wall of the cap has been painted white. (MWT Collection)

In August 1902 the Nortons purchased row of four shops in Nevill Parade, operating two and leasing out the other pair. "J & W Norton" sold a wide range of products including flour, groats, bread, corn, hay, straw, manure, seeds, dog biscuits, rice for feeding poultry, medicines and feedstuffs for cows and other animals, and eggs for rearing pheasants and other game birds.

John Norton died on 2nd April 1908, leaving his entire estate to William. Trading continued, but the business suffered during the first World War. William's son Leslie Norton, born in 1895, joined the business after leaving school, and was the last person to work the windmill.

Around 1914, flour production at the mill ended, but the milling of animal feed by wind power continued. In around 1923, a 15hp paraffin-petrol engine was purchased from Richardson's Mill, Boughton-under-Blean, which was being demolished. A set of Derbyshire Peak millstones were also purchased, and set up on the second floor, as there was no extra room at third floor level. The new millstones were set up so that the engine could power all the machinery in the mill, without having to turn the sweeps.



Meopham Mill, c1918, showing the Norton's shop and a large advert for the tea gardens. The mill now has four shuttered sails. (MWT Collection)

The engine was installed in the shed beside the mill, which is now used as the Parish Office. It had a heavy fly wheel which had to be spun to start it. The engine worked first on paraffin and was later switched to petrol after it had warmed up. It is on record that Meopham Mill generated its own electricity from about 1923 when the engine was installed – but how this was achieved is unclear.

The two remaining sweeps were still turning in August 1930, but by September 1934 they had lost their shutters and were clearly out of action.



Meopham Mill in 1939, a few years after it ceased working by wind power. Only two sweeps are left and the fantail is a skeleton following storm damage in 1935. (The Mills Archive Harry Meyer Collection)

Early in 1935, the mill was hit by strong winds and was only saved by the combined efforts of Mr Norton and his sons, Leslie and David. On 16th March the East Kent Gazette reported: *"During Sunday night three men risked their lives on top of a windmill in a gale, fighting to save the mill from fire and collapse. About eight o'clock in the evening it was found that the fan, the small wheel which keeps the big sails into the wind, had broken away from its gear... and was whirling at terrific speed. Sparks were flying from the friction, and a warning was telephoned to the nearest fire brigade to stand by. Mr Norton and his two sons managed to climb out onto the timbers supporting the fan, but in the gale were helpless. Piece by piece the fan broke up, but other serious damage to the mill was averted."*

Leslie Norton took charge of the business before the Second World War. As a result of local interest, the mill became a listed building in 1952. In 1958, Mr Norton approached Kent County Council for assistance with the mill's preservation. After an inspection by the County Architect, KCC acquired the freehold of the mill and engine house on 13th November 1959, leasing it back to Mr Norton for 999 years.

Restoration work was undertaken by E. Hole & Son, millwrights of Burgess Hill in Sussex, at a cost of £4,375. The work began in May 1962 and was completed in October when four new sweeps were installed.

After the death of Mr Norton in 1967, the lease of the mill was put up for sale. The Meopham Windmill Trust was established and enough money was raised locally to purchase the lease of the mill and engine house. The Trust was also able to purchase the land on which the mill stands. This was laid out as a garden and the windmill was opened to the public for the first time in July 1971.

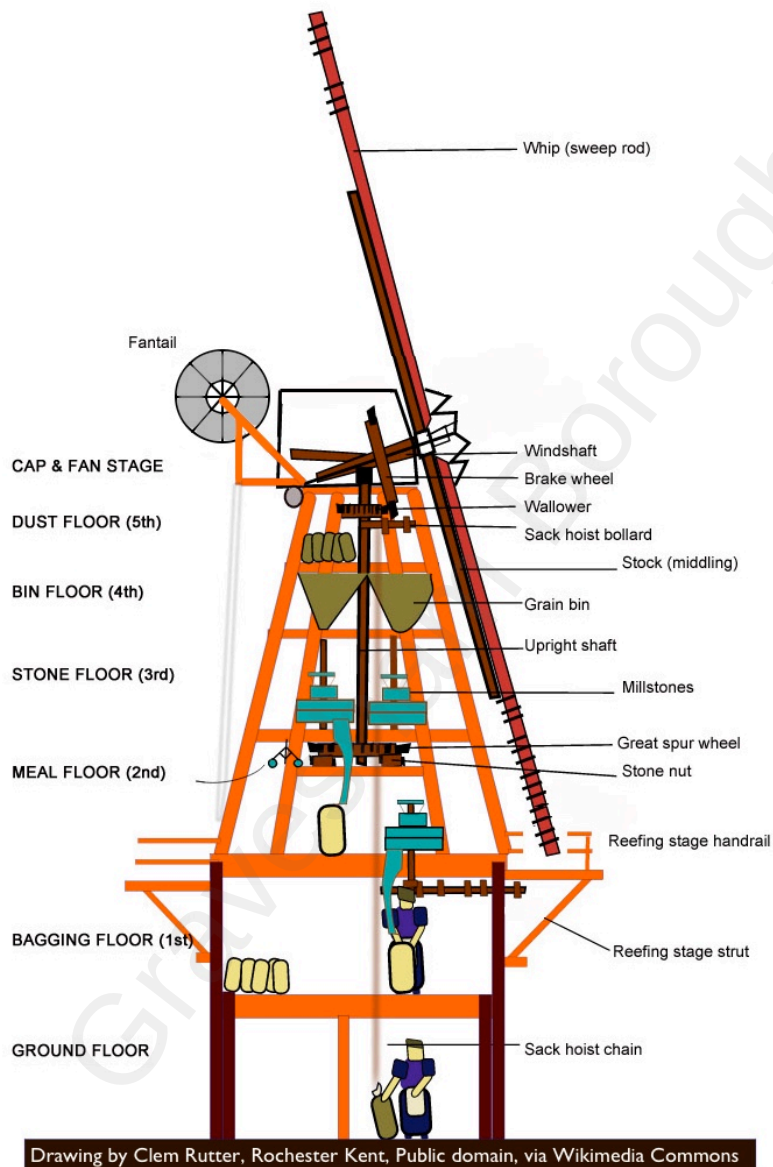
Major repairs to the mill were undertaken by Kent County Council in 2002/03 as part of a Heritage Lottery-funded project. The weatherboard cladding of the mill was repaired and re-tarred. The cap of the mill was lowered to ground level for repair and a set of new sweeps, designed by Vincent Pargeter, were installed.

3. Description of the mill

The structure

Meopham Windmill is a **smock mill**, one of only 50 complete examples in the UK. It is unusual in being six-sided, rather than the usual eight – one of only three hexagonal smock mills to survive.

The windmill's tower is a tall tapering structure containing five floors. The lower two floors are built of brick and the upper floors are timber-framed. The tower walls slope inwards towards the top of the mill so the area of each floor is smaller than the one below it.



A wide **reefing stage** platform encircles the mill tower at second floor level, which is the junction between the brick base and the timber-framed 'smock' from which the mill takes its name.

Power from the wind turns the **sails** of the windmill, which are often called **sweeps** in areas south of the River Thames. The sweeps are mounted at the front of the mill's **cap** roof.

Because the wind does not always blow from one direction, the cap must be able to turn all the way around in both directions so that the sweeps always face the oncoming wind.

A small set of sweeps at the rear of the cap, the **fantail**, acts like a weathervane to turn the cap around automatically. The fantail works 24 hours a day to ensure that the sweeps always face into the wind.

The milling machinery

Inside the mill, power from the sweeps is conveyed from the top of the mill to the bottom by a system of gear wheels and shafts.

The **brake wheel**, positioned inside the cap, drives the **wallower** at the top of the central **upright shaft**. A large brake shoe encircles the brake wheel, and this can be applied gently to bring the sweeps to a halt.



The brake wheel, located inside the cap at the top of the windmill.

Lower down, below the third floor, the **great spur wheel** transfers power to three pairs of **millstones**. Two pairs of stones are located on the third floor and an extra pair is positioned on the second floor. This pair, added during the 1920s, could be driven either by wind power or by the petrol engine which was located in what is now the Parish Office.

Other machinery in the mill includes a wind-powered **sack hoist** which lifted sacks of grain to the top of the mill ready for milling. A hand-powered **winnowing machine**, for cleaning the grain before it is milled, can be seen on the first floor.

The milled flour, or 'whole meal', could be passed through the **flour dresser** to sieve off the bran if white flour was required. This machine, powered by the sweeps, can be seen above head height on the second floor.

4. Aim of the restoration project

Overview

Kent County Council's Heritage Conservation Team is responsible for the maintenance and repair of the structural and mechanical elements of the windmill, and for the protection of its surviving historic fabric.

To ensure that the external working parts of the windmill last as long as possible, it is important that they are maintained in working condition.

Currently, the cap roof of the mill is damaged and is seized in one position. For the time being, the fantail at the rear of the cap has been removed. The sweeps of the mill are now in a fragile state and can no longer rotate as designed.

The remainder of the windmill is in excellent condition and it has the potential to be returned to full working order. This will mean that the cap and sweeps will turn regularly and will be capable of milling grain into flour occasionally.

The sweeps and fantail are modern replicas of historic components. These will be renewed once again, following the traditional designs prepared by millwright Vincent Pargeter. The sweeps will be fitted with one third set of shutters to allow them to rotate in the wind.

The cap of the mill contains a large amount of historic fabric. This will be carefully repaired and strengthened to return it to a sound mechanical and structural condition.

What exactly needs to be done?

To repair the cap and sweeps of Meopham Mill properly, it will be necessary to lower them to ground level. Most of the repairs will be carried out in specialist workshops off site.

The dismantling operation will take several days to complete, and will leave the windmill with a temporary flat roof while repairs to the cap and sweeps are completed. The whole process of restoration is expected to take 12 months.

To dismantle and lower the sweeps and cap, a large mobile crane will be needed. This must be placed as close to the base of the windmill as possible.

A mobile elevated work platform or 'cherry picker' will also be needed to enable the fixings of the sweeps to be dismantled safely. This will also need to be positioned close to the base of the windmill.

A large flatbed lorry will be needed on site to transport some of the components to the specialist workshops.

What changes need to happen on site?

Temporary alterations to the site will be needed in order to allow the crane and cherry picker to get close to the base of the windmill. Once restoration of the mill is complete, the site will be returned to its present grassed appearance.

The parish council's notice board and two small shrubs located between the mill and the road will need to be relocated to create enough room for plant and equipment on the site.

The hedge adjoining the present access track will be removed to allow wider vehicles to enter the site.

These changes will allow a fenced compound to be created on the site. This will remove the risk of injury to pedestrians and damage to vehicles accessing the windmill, the parish office or the properties behind the site.

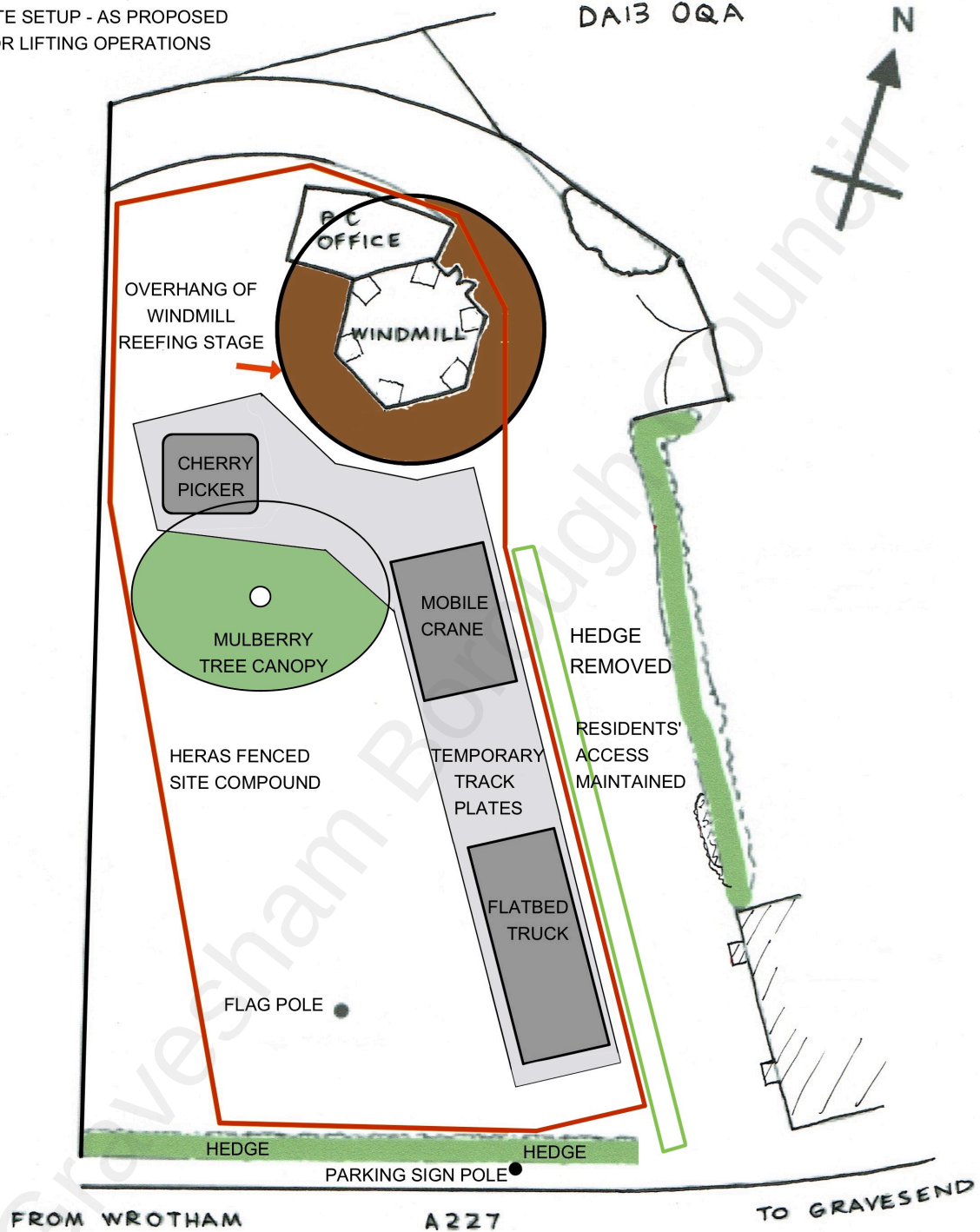
The repair work will take approximately 12 months to complete.

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MEOPHAM WINDMILL

SITE SETUP - AS PROPOSED
FOR LIFTING OPERATIONS
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POST CODE
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