

The Barn, Redgate Farm, Wherstead, Suffolk WHR 071

Historic Building Record

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(TM 169 405)

Historic Building Record

This report provides a written and photographic record at English Heritage (2006) Level 3 of a redundant grade II-listed barn. It has been prepared to a brief written by Suffolk County Council's Archaeological Service (ref. SpecHBR_RedgateFarm_Wherstead_09), Edward Martin, 29th May 2009), and is intended to fulfil a condition of planning permission for conversion (Babergh District Council application B/06/01164).

Introduction

The report is accompanied by a CD containing a photographic record in the form of 46 digital images (Appendix 1), but also includes 10 printed photographs of key features to illustrate the text (Appendix 2). Each image is described in a separate schedule and wherever possible includes a scale rod with half-metre divisions in red and white. The site was inspected on 15th July 2009.

Summary

Redgate Farm lies in open countryside on the western bank of the River Orwell, approximately 500 metres south of the Orwell Bridge and 900 metres east of Wherstead parish church. The site is a conspicuous feature in a picturesque estuary landscape and is reached by a narrow lane which divides the grade II-listed 16th century farmhouse to the north from the barn to the south. At the time of the Wherstead tithe survey in 1839 the farm was a mid-sized tenanted arable holding of 72.5 acres.

The barn is a weatherboarded and thatched structure of the early-17th century with a southfacing porch of the mid-17th century. Built in five bays with a central entrance it formed a traditional threshing barn and survives in good condition with its original two-tier roof of linear butt-purlins and a full complement of wind-braces to the upper tier. The framing consists largely of re-used timber from one or more earlier buildings. A storey post in the northern elevation, for example, contains mortises for arched door-heads and is recognisable as the central post which divided a pair of service doors in a domestic house. The most striking feature of the building is the unusually elaborate internal bracing of its walls: each bay contains a tension brace above its mid-rail and a sharply cranked foot-brace linking the storey posts and ground sills. The result is highly elegant but may have been occasioned by a practical need for additional strength given the extent of re-used material. Despite the loss of both gables, which were rebuilt in the 19th and 20th centuries, and the replacement of its tiebeam braces with bolted knees, the barn is a well-preserved example which is of considerable visual and historic interest and fully justifies its listed status. A nearby cart lodge and granary of the early-19th century is also a good example of its kind, albeit of much later origin, and while the various lean-to sheds adjoining the barn are reconstructions of the 20th century they reflect a major 19th century remodelling which was designed to accommodate cattle in the standard manner of the period. While not of particular value in themselves they illustrate a major historic development on the site and are of historic interest accordingly.



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Figure 1
Current Ordnance Survey Site Plan
Outlining the barn and attached sheds in red, and showing the farmhouse on the opposite side of Redgate Lane to the north and a cart lodge/granary to the south.

Historic Context: Documentary & Cartographic Record

Redgate Farm lies in open arable countryside on the edge of the River Orwell, approximately 250 metres west of its bank and 500 metres south of the Orwell Bridge. Wherstead parish church is some 900 metres distant to the west. The site is a conspicuous feature in a picturesque landscape and is reached by a narrow lane from the B1456, which lane divides the farmhouse to the north from the barn to the south. The house is a grade II-listed timberframed and rendered structure with a mid-19th century brick extension, and is dated to the 17th century in the Schedule of Listed Buildings. It in fact dates from the mid-16th century, with evidence of a central hall, cross-passage and service bay to the west and a rebuilt early-17th century parlour to the east. At the time of the Wherstead tithe survey in 1839 the farm was a mid-sized tenanted arable holding of 72.5 acres (of which just 10 were laid to pasture) owned by Walter Clarke Esquire and occupied by James Josselyn. The tithe map shows the barn as a detached structure with a central porch projecting from its southern elevation (figure 2). By 1886 it had acquired a number of extensions with enclosed yards to both north and south, and these buildings were altered in the following decades as shown in figures 3-5. Many local barns were similarly altered in the 1850s and 1860s as cattle housing was required to compensate for the falling price of grain after the repeal of the Corn Laws in 1846.

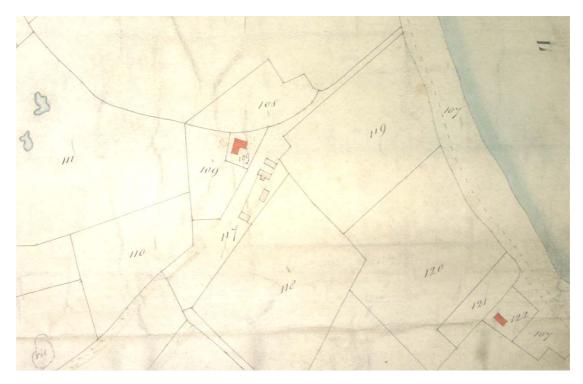


Figure 2
Redgate Farm on the Wherstead tithe map of 1839, showing the farmhouse in red and the River Orwell to the east (Suffolk Record Office).



Figure 2a

Detail of the 1839 tithe map showing the distinctive T-shaped outline of the barn and porch on the opposite side of the broad lane to the farmhouse. The farm yard was described as 'house, yards, etc.' on the apportionment (plot 117) with the ground adjoining the house as 'orchard' (109). The large field to the east was 'Stable field' (118) and the enclosure north of the house 'Malt House Piece' – although there is no obvious indication of a maltings.

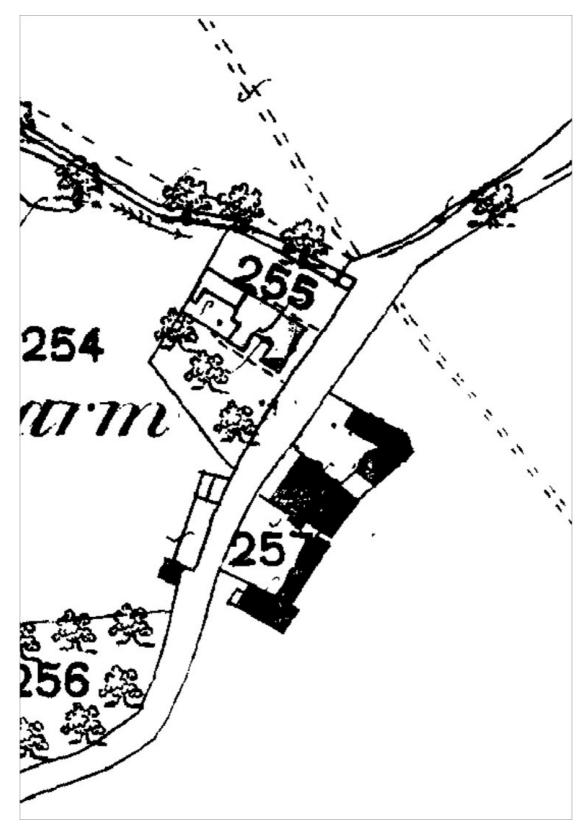


Figure 3
The first edition 25 inch Ordnance Survey of 1882, showing the addition of various sheds and yards to the barn. These changes were necessary to accommodate the cattle into most local farmers diversified after the arrival of the railways.

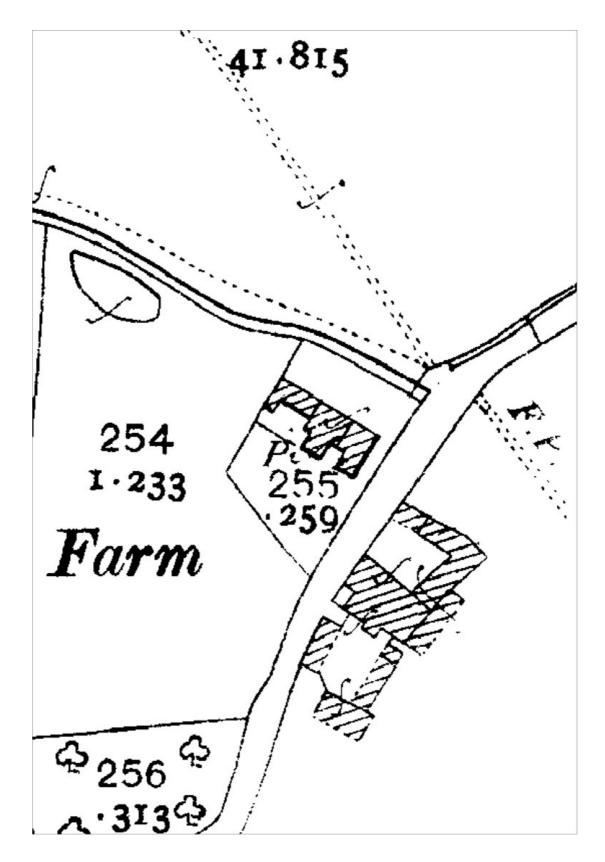


Figure 4
The second edition Ordnance Survey of 1904 showing the surviving open-sided shelter against the barn's eastern gable for the first time. A new yard and open-sided shelter sheds had been added to the south. Open-sided structures such as cart and implement lodges and animal shelter-sheds are indicated by broken lines.

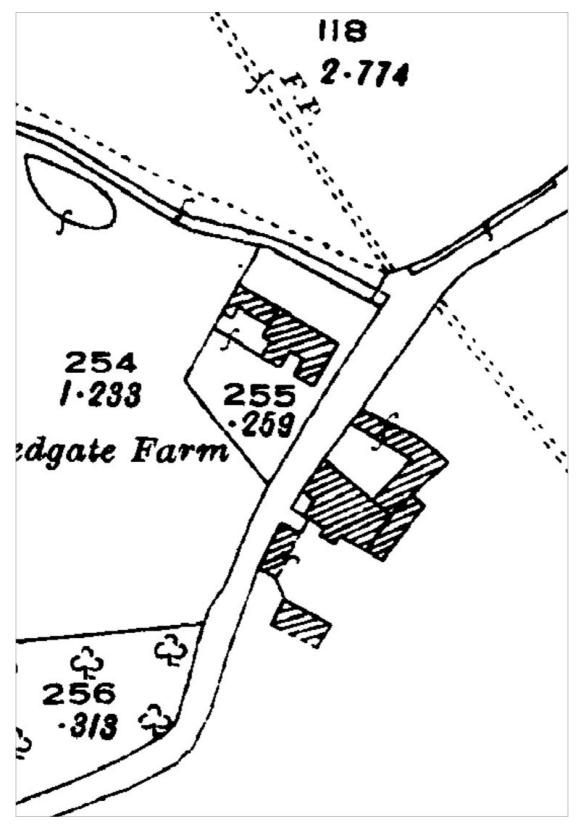
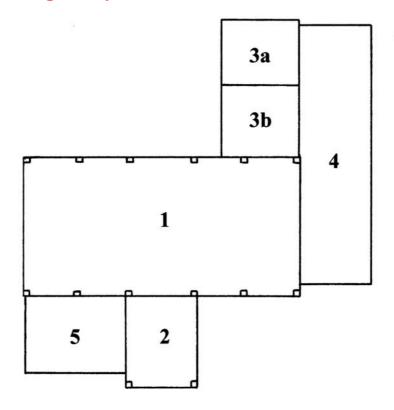


Figure 5
The third edition Ordnance Survey of 1927 showing the partial demolition of the southern yard of 1904.

Building Analysis



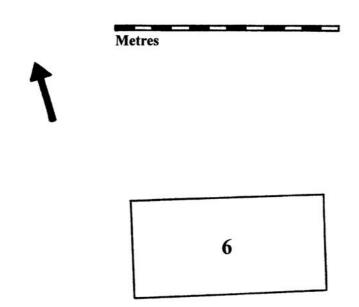


Figure 6
Block Plan of site, identifying each area of the farm complex with a number for ease of reference in the text and photographic record.

Key to Figure 6

- 1. Timber-framed, weatherboarded and thatched barn of five bays. A traditional threshing barn of the early-17th century with a central entrance to the north. Unusually elaborate internal bracing with cranked foot-braces to all storey and corner posts and tension braces in all bays. A steeply pitched roof structure consisting of two tiers of butt-purlins with wind braces to the upper tier. Copious re-used timber. The roof-plates containing face-halved and bladed scarf joints of typical 17th century form. Both gables rebuilt in the 19th and 20th centuries, and all tie-beam braces replaced with bolted knees in the 19th century, but otherwise the frame is largely intact. Correctly listed at grade II and dated to 'probably the late-16th century' in the Schedule.
- 2. A mid-17th century gabled porch added to what appears to have been the original rear, southern elevation of the barn. Narrow stud with mid-rails and externally trenched braces rising from the corner posts. Evidence of a blocked original side-door in the western elevation. Unusually long and narrow at 4.9 metres in depth by 3 m in internal width (16 ft by 10 ft).
- 3. A pair of timber-framed, weatherboarded and pantiled loose boxes divided by a $20^{\rm th}$ century partition of re-used railway sleepers. Formerly entered from an enclosed cattle yard to the north of the barn. First shown on the Ordnance Survey of 1886 but rebuilt in the mid- $20^{\rm th}$ century.
- 4. A lean-to, pantiled vehicle or farm implement shelter adjoining the barn with open sides to the east and the southern gable. Shown on the Ordnance Survey of 1904 but rebuilt in the mid-20th century with softwood rafters and round-wood arcade posts.
- 5. A lean-to pantiled loose box shown for the first time on the Ordnance Survey of 1886 but largely rebuilt in the 20th century. Entered from a former cattle yard to the south of the barn.
- 6. A timber-framed and weatherboarded early-19th century cart lodge with a granary floor reached by a replaced external stair adjoining the western gable. Much re-used timber. Now pantiled but the steep roof pitch suggests it was formerly thatched. Good grain bins of the late-19th century survive on the upper storey.

N.B. The attached sheds (3-5) are much-altered additions of the late-19th and 20th centuries that are of little historic significance in themselves but form part of the barn's traditional external character. In consequence they are not discussed further below, and the granary, which preserves good late-19th century grain bins as shown in illus. 4, lies outside the scope of this report.

The Barn (1)

The barn at Redgate Farm is a timber-framed and weatherboarded structure of five bays on a south-east/north-west axis (simplified to east-west for the purpose of this analysis). It extends to 14.6 m length by 6.7 in overall width (48 ft by 22 ft) and its walls rise to 4.0 m at their roof-plates (13 ft), including a shallow plinth of red-brick. The roof structure is steeply pitched at *circa* 55 degrees (suggesting it was designed for thatch) and contains two tiers of butt-purlins with a full complement of wind-braces to the upper tier – almost all of which remain *in situ*.

The walls are fully framed in the medieval tradition, with jowled storey posts and pegged tenons, but consist largely of re-used timber with numerous empty mortises, rafter housings

and other features that do not relate to their present context. Several timbers were fire-damaged prior to re-use, and the storey post which divides the two western bays of the northern elevation can be identified as the central post of a service partition in an early-16th century domestic house (it bears rebates and arch mortises for a pair of service doors). The studs are interrupted by horizontal mid-rails 1.5 m (58 ins) below the roof-plates and the storey posts and tie-beams contain empty mortises for arch-braces that were entirely replaced by bolted knee-braces in the 19th century.

The most striking feature of the building is the unusually elaborate internally trenched wall bracing: each bay contains a tension brace above its mid-rail and a sharply cranked foot-brace linking the storey posts and ground sills. The result is highly elegant but may have been occasioned by a need for additional strengthening given the extent of re-used material. Foot braces are more typically found in late-medieval barns but there is nothing to suggest they are re-used in this instance, and the presence of face-halved and bladed scarf joints confirms the barn dates from the first quarter of the 17th century (or – less probably – the closing years of the 16th century). Joints of this form are rarely found prior to 1600. Both gables were rebuilt in the 19th and 20th centuries, and some studs and braces have been lost, particularly in the penultimate eastern bay of the southern elevation, but most of the wall framing is original.

There is no obvious evidence of the barn's 17th century cladding but the absence of infill notches suggests it was either rendered externally or possibly boarded from the outset. The barn was originally entered by full-height doors to the north and would have possessed a smaller door to the south, as indicated by the mortises in the roof-plate of the central bay for studs that were removed when the porch was added. Barns of this period typically possessed small rear doors in this manner, sufficient to create a through-draught for threshing and winnowing but not to admit vehicles.

The Porch (2)

The porch is an addition of the mid-17th century which required the removal of wall studs from the central bay of the barn. At 3 m in internal width by 4.9 m in depth (10 ft by 16th ft) it is unusually long and narrow but consists of only a single bay with mid-rails to both sides and evidence of full-height doors in the gable (both the barn's entrances have been reduced in height during the 20th century). At 11 cm by 7 cm (4.5 ins by 3) the wall studs are significantly smaller than those of the main barn and contain externally trenched braces rising from the gable posts. A gap in the stud mortises beneath the mid-rail of the western elevation suggests the presence of a blocked original side-door of 90 cm in width (3 ft) some 1.6 m (5.5 ft) from its junction with the barn.

Historic Significance

The barn is a well-preserved traditional threshing barn of the early-17th century and fully justifies its listed status. It is a conspicuous feature of an important historic landscape alongside the River Orwell and is visible from the nearby B1456 and the Orwell Bridge. The foot-braces to the storey posts are an unusual and striking feature of the carpentry which compensates for the extent of miscellaneous re-used timber and the loss of the barn's tie-beam braces. Foot braces are more typical of southern Essex and Kent than East Anglia and it is rare to find them in a Suffolk barn. The nearby cart lodge and granary is also a good example of its kind, albeit of much later origin, and while the attached sheds are reconstructions of the 20th century they reflect a major 19th century remodelling which was designed to accommodate cattle in the standard manner of the period. While not of particular value in themselves they illustrate a major historic development on the site and are of historic interest accordingly.

Appendix 1 (on accompanying CD): Full Photographic Record

Descriptions of Photographs in Appendix 1

Photograph no.

- 1. General view of site from B1486 to north showing Redgate Farm to right and the River Orwell to left.
- 2. General view of site from B1486 to north-east.
- 3. General view of site from Redgate Lane to north-east showing farmhouse to right and barn to left.
- 4. General view of site from field to east showing farmhouse to right with Wherstead church in rear to left of barn.
- 5. General view of site from field to south-east showing Redgate Farm to left with Orwell Bridge to right.
- 6. Exterior of grade II-listed farmhouse from east (included for site context).
- 7. Exterior of barn from south showing the open shed (4) adjoining the eastern gable to right and the porch (2) to left.
- 8. Exterior of open-sided shed (2) from south.
- 9. Exterior of barn from south showing the lean-to shed (5) to the left of the porch (2) and the farmhouse in the rear.
- 10. Exterior of barn from south-west showing the pantiled lean-to shed (5) in foreground.
- 11. Exterior of barn from lane to north showing loose boxes (3) to left.
- 12. Exterior of barn from north-east showing central entrance with loose boxes (3) and open shed (4) to left.
- 13. Exterior of barn from east showing open shed (4) to left with granary (6) in rear.
- 14. Exterior of barn from south-east showing the cart lodge and granary (6) to left.
- 15. Exterior of cart lodge and granary from west showing external gable stair to granary.
- 16. Interior of lean-to shed (5) from west showing porch (2) with barn to left.
- 17. Interior of lean-to shed (5) from east showing narrow studwork with barn to right.
- 18. Interior of open shed (4) from north showing eastern gable of barn to right.
- 19. Interior of loose box (3b) from south showing railway sleeper partition with northern box (3a) in rear.

- 20. Interior of loose box (3b) from north showing weatherboarding of barn.
- 21. Interior of cart lodge from west showing floor of granary above.
- 22. Interior of granary from east showing boarded ceiling and grain bins.
- 23. Interior of granary from west showing boarded grain bins to left.
- 24. General view of barn interior from east showing central porch (2) to left.
- 25. Internal roof structure from east showing pegged mortises in tie-beams for removed arch-braces.
- 26. Detail of roof structure from north showing two tiers of butt-purlins with intact wind-braces to the upper tier.
- 27. General view of barn interior from west showing porch to right and northern entrance to left.
- 28. Interior of rebuilt western gable showing 20th century studwork.
- 29. Internal northern elevation to west of entrance showing symmetrical bracing and re-used central post.
- 30. Detail of re-used central post in western half of northern interior showing cranked foot braces and service door rebates.
- 31. Detail of cranked foot braces to central post of western half of northern interior.
- 32. Eastern half of northern interior showing central entrance bay to left with jamb mortises in roof-plate.
- 33. Detail of eastern half of northern interior showing cranked foot and tension braces.
- 34. Eastern half of northern interior showing cranked foot braces to central post.
- 35. Detail of large Roman numerals to foot braces in eastern half of northern interior.
- 36. Detail of replaced north-eastern corner post showing lack of mortise for truncated foot brace.
- 37. Detail of face-halved and bladed scarf joint in roof-plate of penultimate eastern bay.
- 38. Detail of mid-rail in eastern half of northern interior showing rafter housings in re-used timber.
- 39. Interior of rebuilt eastern gable showing narrow studwork beneath original tiebeam.
- 40. Eastern half of southern interior showing renewed framing to right and original studs behind boarding to left.

- 41. Roof-plate of central southern bay adjoining porch showing empty mortises of removed studs.
- 42. Interior of porch (2) showing reduced height of doors.
- 43. Eastern interior of porch showing studs and mid-rail without wall bracing.
- 44. Western interior of porch (2) showing unpegged stud in position of original side-door.
- 45. Western half of southern interior showing tension and foot braces with charred re-used mid-rails.
- 46. Detail of cranked foot braces to central post in western half of northern interior.

Appendix 2 (pp. 13-17): Selected Printed Photographs



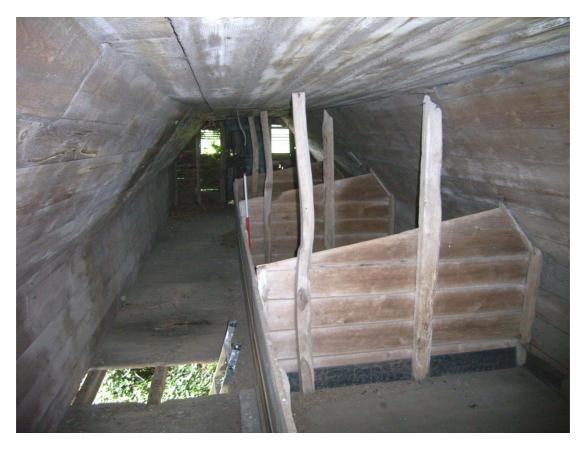
Illus. 1. General view of site from field to south-east showing from left to right the tower of Wherstead parish church (in the background), the cart lodge/granary (6), the barn, farmhouse and the Orwell Bridge.



Illus. 2. Exterior of barn from south showing the open shed (4) adjoining the eastern gable to right and the porch (2) to left.



Illus. 3. Exterior of barn from north-east showing the central entrance doors with the pantiled loose boxes (3) and open shed (4) to left.



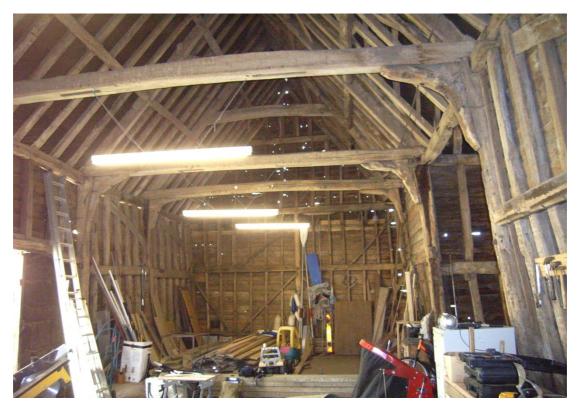
Illus. 4. Interior of granary (6) from east showing good boarded grain bins.



Illus. 5. General view of barn interior from east showing central porch (2) to left and bolted knee-braces replacing the original arch-braces to the tie-beams.



Illus. 6. Detail of roof structure of barn from north showing the two tiers of buttpurlins with intact wind-braces to the upper tier. The clasped-purlin roof of the porch (2) is shown to the left



Illus. 7. General view of barn interior from west showing the porch (2) to right and the northern entrance to left. The narrow studwork of the rebuilt eastern gable is visible in the rear.



Illus. 8. Internal northern elevation to west of entrance showing symmetrical bracing and the re-used central post of a late-medieval domestic service partition.



Illus. 9. Detail of the eastern half of the northern interior showing the distinctive bracing pattern with tension braces above the mid-rails and cranked foot braces to the storey posts. The north-eastern corner post to the right is a replacement and a face-halved and bladed scarf joint of 17th century form is visible in the roof-plate at top-left.



Illus. 10. Western half of southern interior showing tension and foot braces with charred re-used mid-rails.