

NEW BARN Ryebank Farm Climping

Supplement to Planning Proposal



Prepared by

JCA Architects Ltd

Condition and repairs

Oak frame aisled barn and attached cart barn

The single aisled barn and adjoining cart barn, are in very reasonable order. Considering the major alterations that have been carried over decades to suit changes in use, this condition is clear proof of the quality of the original buildings. Even with the damage these changes have made to the fabric the barns remain undeniably viable.

Both adjoining barns have corrugated sheet roofs, but battens from a previous thatching are clearly visible in several areas.

The main aisled barn has had approximately 30% of the rafters to the main queen strut roof replaced overtime, these as a result of failure or the removal of the south-west hipped end, replaced by a gable. Several sections of the oak roof plates have been replaced as well as sole plates. A brick plinth remains intact for the most part, although in need of attention like most of the building. This provides the seating for a quality coursed flint wall.

The timber frame itself is very sound, despite the various alterations made to it structurally to suit the users needs internally, with a number of up-braces missing and in one instance the complete tie-beam. There are jowl topped wall posts and the arcade posts are braced by a plate at the head, supported on up-braces. Where timber sections have been removed on the aisle side, steelwork has been threaded through the remaining timbers to accommodate the changes.

There have been many other alterations to the original barn, almost all wholly inappropriate, such as the hip end replacement already mentioned and a modern steel panelled extension and roof at the north-east end. The original full height doors on the south-east face retain the door posts, but the opening is infilled with interlocking steel sheet and the threshold has been replaced by a concrete plinth. Adjoining that bay to the west, is oddly the only section with timber studwork on the building. This has been built up in concrete blockwork with modern timber boarding above. This oddity is quite probably as a result of the removal of an extension to the south, removed in the past and referred to in the Heritage Asset Statement.

The remaining intact flint walls are in excellent condition, with brick quoins to ends and openings and on the south-east section brick lined triangular air vents. Original openings on the north-west facing flint wall have been closed up with concrete block for the most part, as have circular openings once created for the previous agricultural operations of grain drying.

The gable end to the north-west, originally hipped with coursed flint wall, has been largely demolished to accommodate a single piece steel roller shutter door. The integrity of the

right hand corner of this opening has suffered as a result, but despite this remains structurally secure.

The adjoining cart barn is in excellent order, apart from the roof as previously mentioned. The long, unbroken, south west wall is coursed flint, as is the north-west end. The north-east side was the open cart barn and all this remains perfectly intact, but with concrete blockwork and plywood sheet enclosing the space on the outside of the frame.

Around and in places attached to the buildings, are various "modern" enclosures for materials used in the current concrete casting use of the buildings. The five grain silos will be removed as will be the redundant green houses and several hundreds of square metres of concrete yards and paths.

The use of the barns for the past 20 years as a concrete casting plant has been damaging to the fabric. The constant presence of large quantities of moisture given off in the curing process of the concrete is having a slow but progressive impact on both the frame and the wall structures. The main building was designed for dry grain and hay storage and the present use is a genuine risk to this Heritage Asset.

This document is not a full repairs schedule, that would be provided at a post planning stage once a more intensive survey has been enabled. It is intended to indicate the type of repairs that will need to be undertaken and to give further support to the viability of the building for the proposed change of use.

The following pages take each section of the oak framed barn bay by bay

BAY 1



Missing wall post replaced in oak together with tie beam and up brace, to reconnect to arcade post, also with up brace. Queens struts re-introduced mortised into tie beam and principal rafters.



Remove gable ended roof section and reconstruct original hip with oak rafters, hips, purlins and wall plates in readiness for clay tile roof cladding proposed.



Missing tie beam and up-brace replaced at connection with arcade post, in oak. All connections into original locations.

Malmstone or similar plinth base to replace concrete base beneath arcade post.

Existing aisle roof construction replaced with oak rafters, purlins and wall plates in readiness for clay tile roof cladding proposed

BAY 2



Missing post and up-brace replaced. All connections into original locations.

Blockwork wall removed and timber suds extended to lower section. Weatherboard removed and both levels reclad in green oak feather edge boarding.



Existing roof construction in good order. Corrugated cladding and battens removed in preparation for new cladding.



Missing up-brace replaced at connection with arcade post, in oak. All connections into original locations.

Malmstone or similar plinth base to replace concrete block base beneath arcade post.

Existing aisle roof construction replaced with oak rafters, purlins and wall plates in readiness for clay tile roof cladding proposed

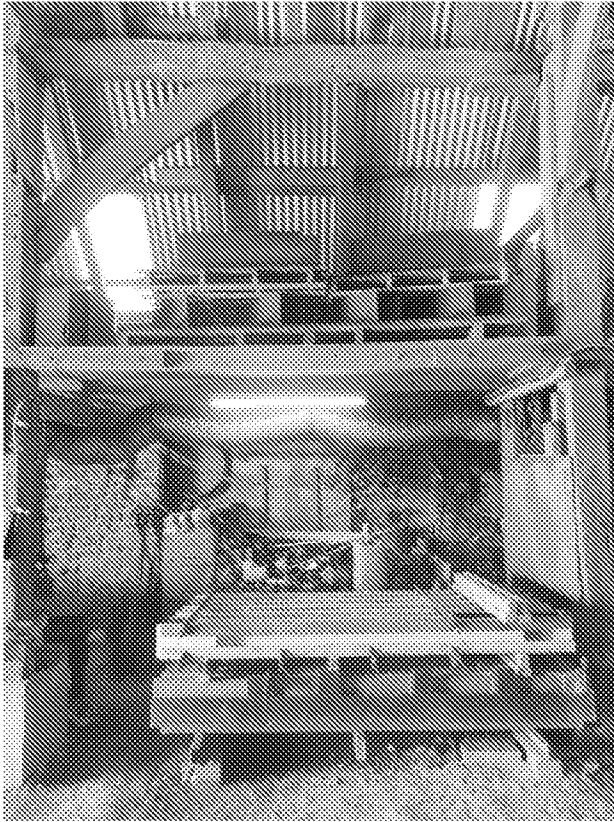
BAY 3



Steel frame and steel cladding removed and door posts restored. Frame post replaced with up-brace all reconnected to tie beam in original locations, all in oak.



Existing roof construction in good order. Corrugated cladding and battens removed in preparation for new cladding. Any timber repairs that become apparent will be dealt with wherever possible, in situ.



Remove steel angle threaded through below up-brace connection to arcade post and realign plate back onto notch at head of arcade post. Replace up brace connecting plate to arcade post. Remove redundant timber plates and bearer.

Malmstone or similar plinth base to replace concrete block base beneath arcade post.

Take off existing aisle roof timbers and replace with oak rafters, purlins and wall plates in readiness for clay tile roof cladding proposed



Steel frame and steel cladding removed and new oak wall post fitted and connected to tie beam with new up-brace

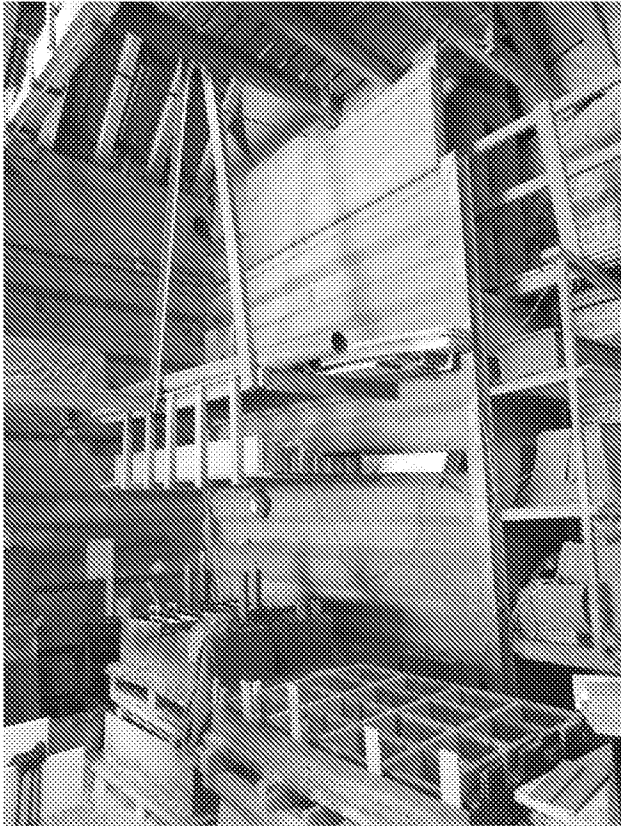
Existing roof construction in good order, corrugated cladding removed in preparation for new cladding. Any timber repairs that become apparent will be dealt with wherever possible, in-situ.



Remove steel angle threaded through below up-brace connection to arcade post and wall post. Replace the jointed aisle post and modern planted up-braces connecting tie-beam to arcade post located in new mortises, all in oak. Remove redundant timber plates and bearer.

Malmstone or similar plinth base to replace concrete block base beneath arcade post.

Take off existing aisle roof timbers and replace with oak rafters, purlins and wall plates in readiness for clay tile roof.



Steel frame and steel cladding removed and oak wall post exposed and new oak up-brace added

Existing roof construction in good order, corrugated cladding removed in preparation for new cladding. Any timber repairs that become apparent will be dealt with wherever possible, in-situ.

With the reinstatement of the hip roof, certain existing hip rafters will require replacement, to be assessed on closer inspection.



Take off existing aisle
corrugated roof and timbers
and replace with oak rafters
and wall plate in readiness for
clay tile roof.

NORTH-WEST GABLE END

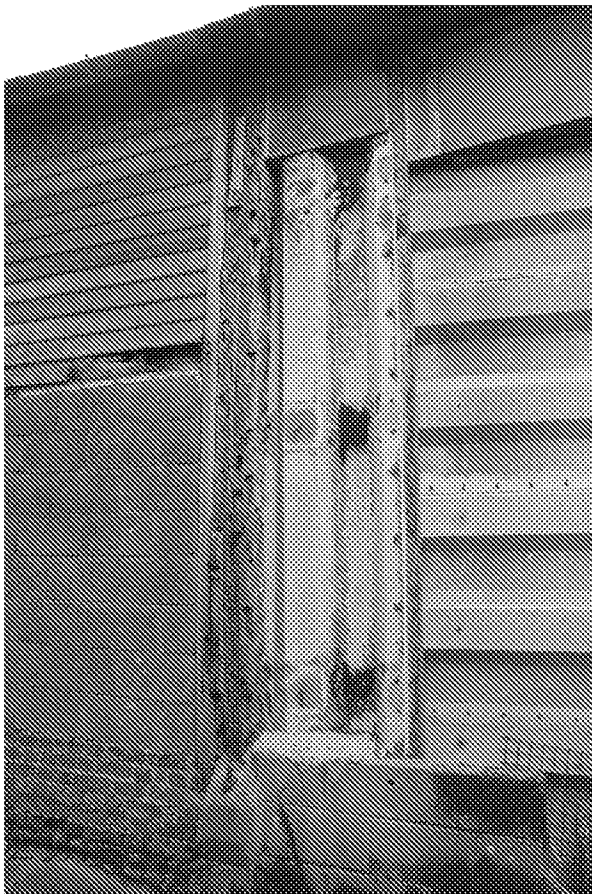
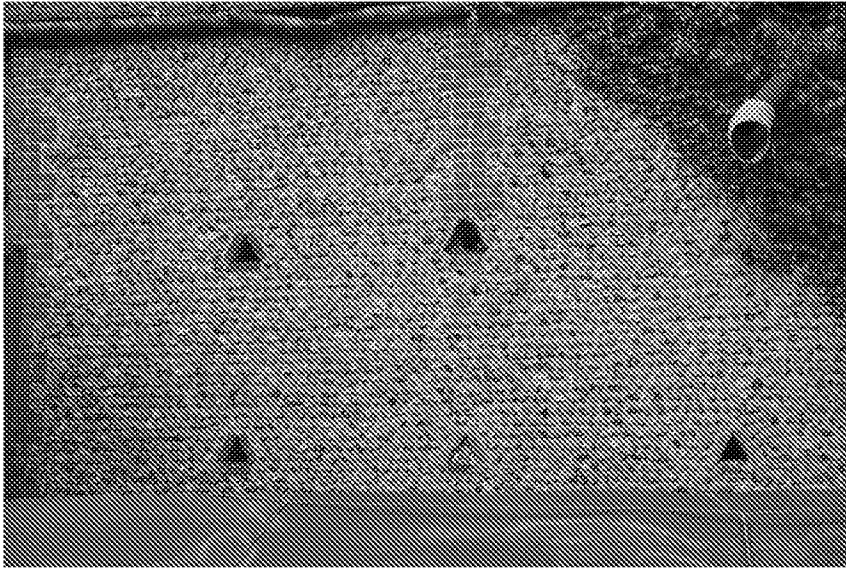


Hip to be reinstated at this end, see Bay 1 description.

The flintwork to the right hand side of the opening to be taken down and rebuilt. The brick quoin is sound and will require support during the rebuild operation.

Some rebuilding will be necessary on the left hand side but only sufficient to ensure a proper bond with the new flintwork required in the course of reducing the opening.

LONG SOUTH-EAST FLINT WALL

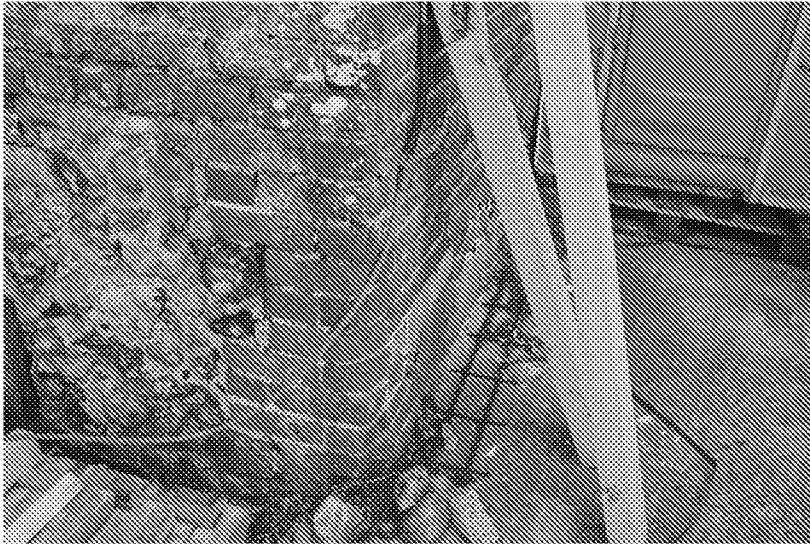


Existing long flint wall in fine order, however minor repairs where pipework to be removed with new flints set in lime mortar.

Two of the six existing triangular air vents to be reopened and brickwork cleaned. The middle/top vent is missing the two side bricks, these to be reinstated.

The steel cladding frame and removal are covered under Bay 3 description. The concrete base to the door post to be removed and the brick plinth continued along to create a pier base to reseal the post.

The adjoining plinth wall to be repointed and eroded bricks at ground level cut out where too badly eroded and replaced on lime mortar bed and pointing.



Cut or rake out modern sand cement joints/pointing used as past repairs and replace with lime mortar.



The brick and flint work is of generally very high quality given the rural nature of the building and is in good order with a few exceptions where alterations have lead to the use of totally inappropriate materials, all of which it are intended to be replaced to match as closely as possible original work.