

**St. Osyth Priory, Essex.
Repairs and Alterations
To the
Tithe Barn, Dairy and Cart Lodge**



Enabling Works Schedule

September 2022
Carden & Godfrey
33 Clerkenwell Close
London EC1R 0AU

Introduction

1. This brief schedule firstly identifies those parts of the three buildings which are in urgent need of temporary propping, making safe or other means of holding repair to last long enough to wait for permanent restoration or renewal within the eventual Repairs and Alterations Project.

It is strongly recommended that these temporary works are put in hand as soon as possible now, irrespective of the outcome or process of grant applications. Meanwhile, access should be restricted and no access permitted to Dairy 1st floor.

- 1.2 The second Schedule deals with Enabling Works intended to examine the buildings and site in certain areas to provide relevant details to inform the eventual Scheme Design.
- 1.3 The inspections for these Schedules were by Ian Angus of Carden and Godfrey in dry warm weather on Monday 19th September 2022.

2. Urgent Holding Repairs

2.1 Tithe Barn

- 2.1.1 Construct propping to the fractured western rafter which has collapsed over the first floor gallery platform adjacent to the fireplace.

Install temporary raking timber to support the subsided roof battens and prop the raking timber from and through the gallery platform to the solid concrete floor at ground level below.

Brace the propping portal against the west gable wall and from the north and south walls to stabilize it and prevent further movement.

- 2.1.2 Externally, cut and remove the ivy from the full height of the southwest corner. Take care releasing the branches from the electrical sub-main cables which enter the barn at mid height from the adjacent timber pylon.



2.1.3 Subject to further inspection once ivy has been sufficiently cleared, construct a raking shore to buttress the southwest corner from the south, with horizontal timber ground plate, extending out from corner southwards, vertical board set against the subsided southwest framing post, and three diagonal raking struts fixed between the two plates, one from the top and two from either side of the first floor plate level.

Highlight and protect the outer base of the shore/buttress from vehicular damage, by securing a bright large warning bollard or similar.

2.1.4 In the lean-to south Paint Store, just east of the southwest double doors, install Accrows to prop the subsided 2-part central roof purlin. Provide scaffold board spreader for base bearing on the solid floor, and protect the props with bright tape including at base.



2.1.5 To the West-Central South Mistry clear debris from the base of the two decayed South corner posts and insert hydraulic compression jacks or turn-buckles to provide temporary holding support to the collapsing timber frame. Note support under the remains of the posts can be independent from the equally decayed horizontal sole plates.



2.1.6 To the East-Central south Mistry/Cart Entrance, arrest the raking lean of the oak frame by constructing timber raking shore up the east face of the southeast post, with horizontal plate based on the solid concrete screed of the adjacent Dog Kennel Cage.

Note that Raking Shores will need ground anchors driven through this base.



2.1.7 To the Eastern South Lean-to Boiler House, provide temporary Accrow Prop support from internal floor screed to the decayed and collapsing wall plate at west end, under eaves.



2.1.8 To the Barn's South Wall, between the western and west-central Mistry, construct external raking props from ground anchors diagonally up to the top of the two main frame posts which are unrestrained by the missing north wall posts and brackets at the north ends of the principal truss tie beams.



2.1.9 At the Barn's West end internally, prop the two western N-S principal floors beams supporting the gallery platform at the north bearing ends, with Accrows based on the solid floor.



2.2 Dairy

2.2.1 To the 1st floor, cordon off access from the southeast stairs and Barn doorway to prevent anyone walking over the dangerously rotten loft floor without first laying spreader boards.



- 2.2.2 Prop the 1st floor where secondary N-S joists have decayed adjacent and out from the west wall above the south lobby. Accrow propping from solid floor below.

First remove loose ceiling boards and clear debris from exposed 1st floor void.



- 2.2.3 Clear debris from the decayed southeast staircase, above and below, and install temporary propping from ground floor and temporary tread boards, to facilitate occasional accompanied access.



- 2.2.4 In the ground floor lobby and workshop, take down loose ceiling linings including unkeyed plaster, before they fall.
- 2.2.5 In the ground floor lobby west wall, consolidate the unfinished support beam bearings above the re-opened doorway opposite the Cart Lodge.



- 2.2.6 Externally, temporarily, secure loose cable attachment and loose brickwork at high level on the west wall.



- 2.2.7 Externally on the west wall, cut and remove ivy from around the junction with the Barn's west elevation.

Take out/make safe the remains of the 1st floor sash window before the glazed sashes fall dangerously and are lost.



2.3 Cart Lodge

- 2.3.1 At North end, provide propping to both north corner posts of the main frame, as close as possible to their decayed bases, and with props founded on firm ground.

In both cases the props are to support the wall plate from adjacent to its posts. (Easiest probably to support the wall plate's projection beyond the top of the post).





- 2.3.2 At south end similarly provide propping to the southwest post, where the sole plate and brick plinth have collapsed.

The prop needs to support the wall plate within the shed, just north of the post, and needs to be coordinated with the bracing and buttressing of this racked south elevation.

The prop is to be founded on the higher solid floor of the lodge interior.

First cut and clear away the ivy.



- 2.3.3. At the Southeast corner where the southeast mainframe post has been moved by roof thrust and failed principal tie beam joint approx.. 150 mm. away to the east, causing the bolted oak brace to fracture at its junction with the post. The movement strain is not being adequately restrained by the existing timber shores, which ought to be (not removed) supplemented by additional Accrow props and jacks boarded off the Tithe Barn's west wall plinth offset opposite.

The slipped Belgian clay pantiles should be removed from the base of the east roof slope and set aside for re-use on the Lodge.



- 2.3.4 The principal tie beams internally are to be propped from firm ground/solid floor with Accrows where dampness and fractures/shakes have caused decay or distortion and weakened the structure.



- 2.3.5 The upper loft at 1st floor at the south end of the Lodge needs to be cleared out to reduce the considerable loading of the damp decayed beams and boards below.

3. Enabling Investigations (Note: See also recent archeological Reports)

3.1 Tithe Barn

- 3.1.1 East of the middle South Mistry/Cart Entrance, carry out limited shallow excavation adjacent to the Boiler House lean-to south wall, to establish the line and remains of the brick and stone footing of the lost wall thought to have continued the south frame westward up to the middle of the mistry.

(Note: the brick floor survives, therefore the dig should be just along its perimeter).



- 3.1.2 Within the lower (eastern) floor level of the Barn, drill out and excavate a small area of concrete floor to locate the nature of the sub-base, its material, condition and depth below the finished surface of the concrete.



- 3.1.3 Survey the construction of the Waney-boarded platform at east end of the Barn, whether it is historically significant or can be removed without damage to the barn's interior integrity, and whether both concrete floors have the same level either side of the boarded screen.

Also ascertain the construction and condition of the seemingly plastered east end wall of the Barn, full-height and width, and that it provides sufficient fire protection between the Barn and the Cottage next door.



- 3.1.4 To the exterior and the interior, clear debris and storage away from the Base of the walls and around the Barn, in order to enable proper condition surveys (and temporary propping) preparatory to the detailed repair drawings and Schedule of Work.





- 3.1.5 Asbestos panels to be removed by specialist firm and disposed of, in conjunction with checking other suspect material in the Asbestos Report.



- 3.1.6 Trace and audit the electrical circuitry in the barn, label all live cables and test the installation for normal routine compliance re. earthing, insulation and junctions. If unrealistic, disconnect supply at the distribution panel and sub-main entry to the southwest corner.
- 3.1.7 Commission an Ecology Survey, including for bats in order to know the patterns of any wildlife occupation, long before work begins on site.

- 3.1.8 Survey and assemble a Schedule of Existing Historic Materials, including roof tiles, bricks, dressed stone, stone rubble, pavers, frame members and weatherboards, with sizes sources, likely origins and current availability.



3.2 Dairy

- 3.2.1 Carry out a levels survey to relate to the ground floor of the Dairy Workshop and Lobby with the western ground floor of the Barn and with the western ground floor of the Barn and with the approx.) sub-base and sole plate level of the Cart Lodge.



- 3.2.2 In conjunction with the Barn, trace and audit/make safe the electrical installation retaining only mains power and lighting to the ground floor workshop.
- 3.2.3 As Barn, establish a Schedule of materials, sources, sizes and Significance.
- 3.2.4 Test the viability and detail of opening-up the long-blocked northeast ground floor external door. Remove ivy.



- 3.2.5 Shallow excavation of modern gravel around the external wall base to discover and record the nature and condition of the brickwork (some is missing at ground level), and to find the remains of any surviving paving or other ground surface materials.



3.3 Cart Lodge

- 3.3.1 As above, survey and establish a compendium of historic materials including roof tiles, footing masonry/brickwork, timbers sources/species and sizes.
- 3.3.2 As for Barn, attempt to clean debris and storage at least from the base of the wall frames and brick plinth, in order to ascertain construction and condition, and prepare to schedule repairs.
- 3.3.3 Internally, clear local area of ground to dig shallow trench in search of any possible remains of brick or other paving, screed or over-site.
- 3.3.4 Similarly make sufficient space through the timber storage to facilitate eventual detailed condition survey, drawings, specification and carpentry repair schedules, all in conjunction with developing the designs for alteration and change of use.



3.3.5 Research archive for images and descriptions of past appearances etc. of the Cart House, including from before it was moved to its current spot.



3.4 Site-Wide

- 3.4.1 Established optimum finished ground levels on the driveways and footpaths in order to co-ordinate with the three buildings internal floor levels, and most importantly, with the levels of the timber frame sole plates and plinths, to avoid any jeopardising of the floors and sole/base plates by higher external ground.
- 3.4.2 Cut back encroaching vegetation and establish an acceptable regime for pruning trees in the vicinity of buildings.



- 3.4.3 Survey modern site drainage invert levels and relate them to the ground floor levels in the building in relation to kitchen and W.C's drainage.
- 3.4.4 Conclude viability or otherwise of trenching the electrical supply into the Barn at the southwest corner, and removing the last pole and overhead cables.



- 3.4.5 Dig shallow trial holes to chart possible previous ground materials south of the Tithe Barn, including brick or stone paving, and including to survey the extent of brick paving and side walls to the central ramp that extends south from the single doorway in the infilled western mistrey.



