

MS05636

Barn to south east of
Pickhams House,
Cuckfield Road,
Hurstpierpoint BN6 9LL



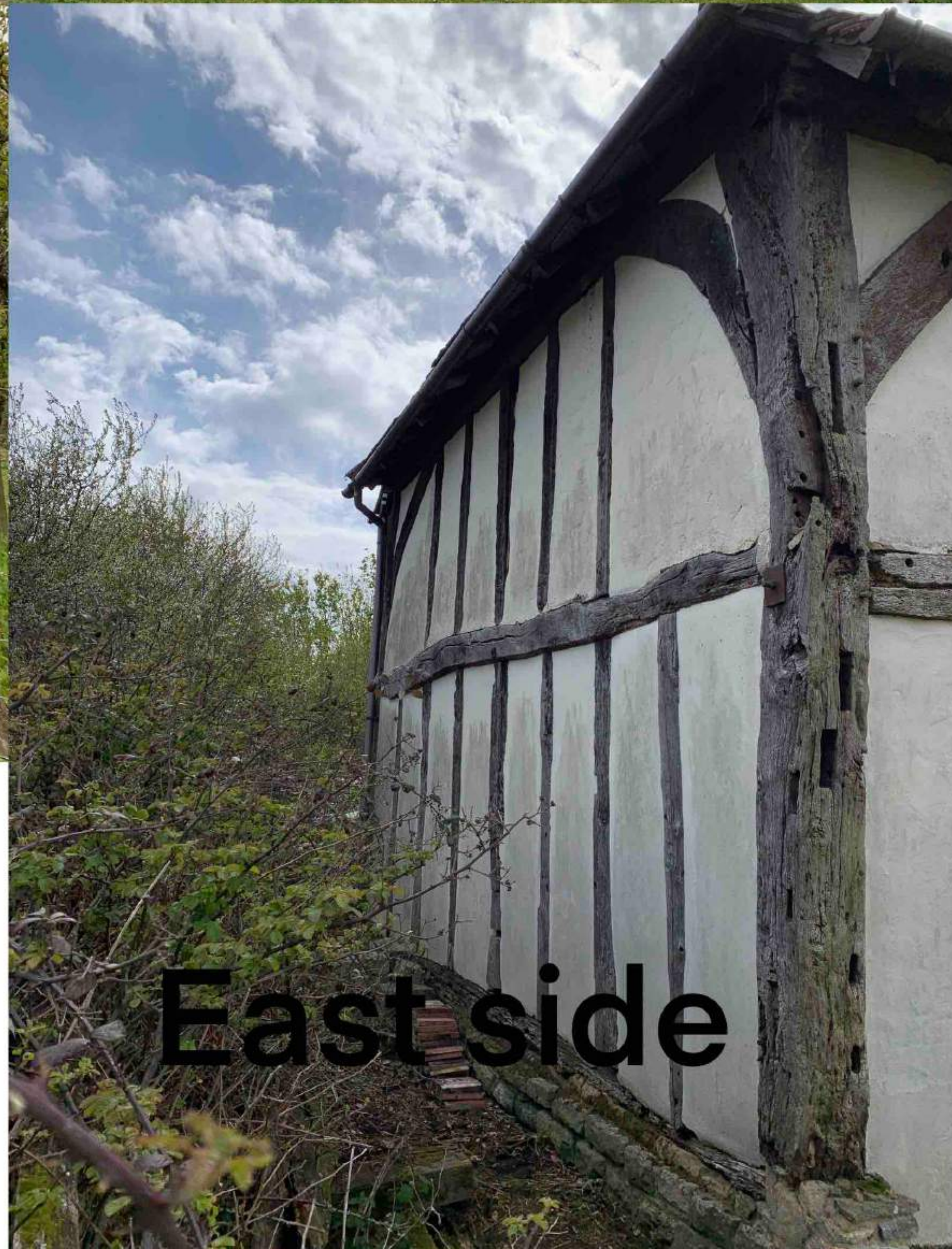
North front



**North front and
west side**



**West side and
south rear**



East side

JOB TITLE Barn at Pickhams House, Hurstpierpoint.		DATE May 2021
ITEM Notes	JOB NO. MS05636	SHEET NO
PREPARED BY BMC	CHECKED BY	

Barn to south east of Pickhams House, Cuckfield Road, Hurstpierpoint BN6 9LL.

The Barn was inspected during the late morning and afternoon of 6th May 2021.

The building was a 17th Century oak timber framed Barn which was Grade II listed.

It is understood that the Barn was previously located near Ringmer, Lewes and was relocated to its current location during the early 1980's.

The Barn's external oak framing had been infilled with modern blockwork between soleplate and eaves plate, to all elevations. The blockwork had been constructed using cement mortar and had been rendered using a cement render.

The south elevation had been over boarded with horizontal timber cladding.

Generally there had been decay of the outer half of the soleplates which had resulted in loss of support to the blockwork infill which, in some areas, had started to drop and rotate outwards, becoming unstable as a result.

The mid-rail of the end frame forming the east elevation appeared to be too short and had been extended to fit. The Barn may have originally been slightly narrower at the east end compared with to the west end. During the relocation reconstruction, this may not have been picked up until after the building foundations and below soleplate masonry had been constructed. There were steel tie rods internally to the east end of the building helping to tie the east end of the building together.

The repair works to the barn are colour coded.

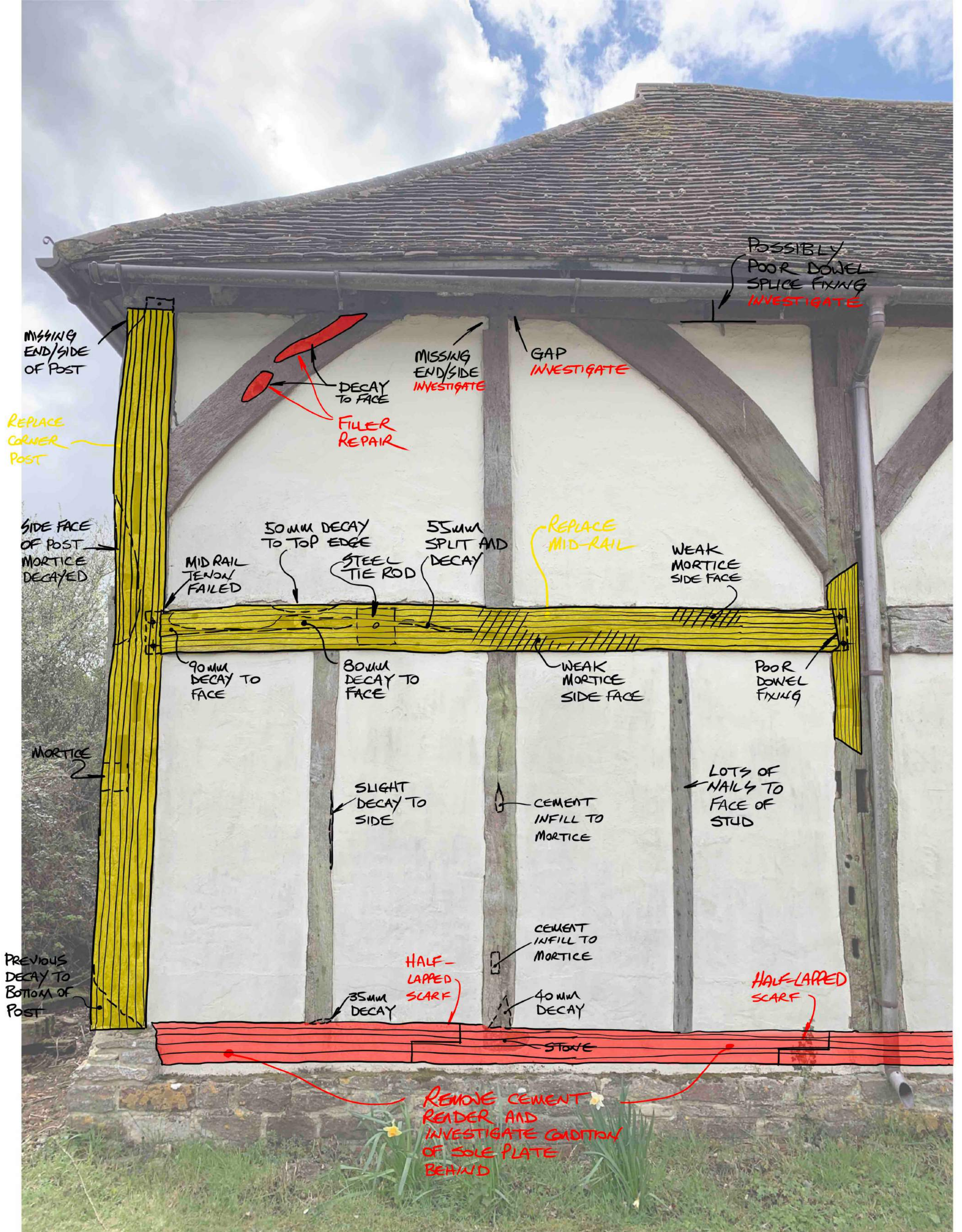
Red items should ideally be carried out within the next 1-5 years and are primarily repairs to the soleplates along with the installation of missing bracing. The decay to the soleplates is currently limited to the outer half of the soleplates which supports the studs and infill blockwork. The main posts which bear onto the whole width of the soleplate appear, in areas where the outer half of the soleplate has decayed, to be gaining support from the inner half of the soleplates. Ongoing decay could therefore result in a further reduction of support to the main frame posts, instability of the structure and would increase the cost of repair by requiring much more temporary works support during the repair works.

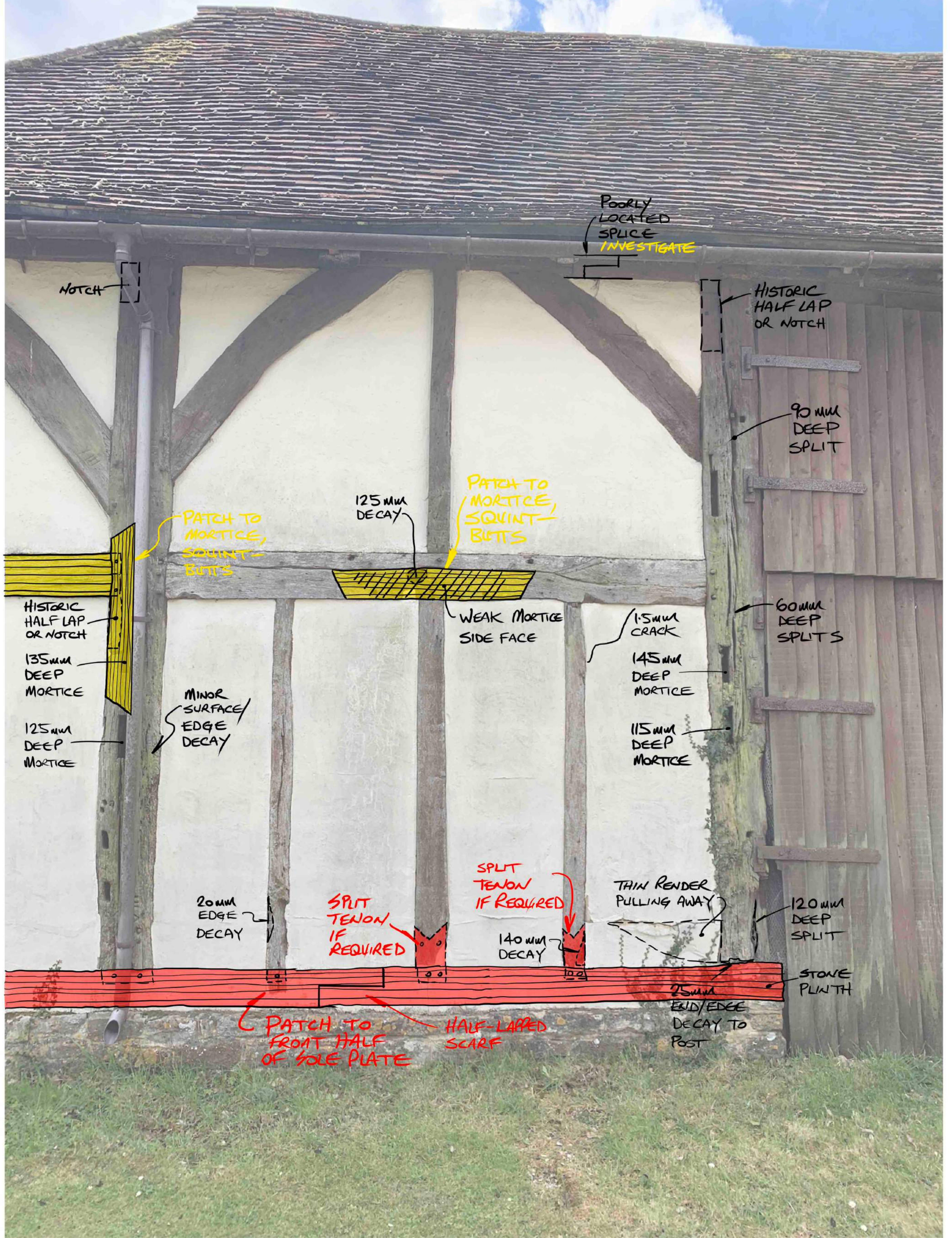
Yellow items should ideally be carried out within the next 5-10 years.

The infill blockwork with cement mortar and cement render is not ideal. The infill masonry should have been constructed using a lime based mortar and render. High calcium renders allow a greater degree of evaporation and reduce the risk of trapped moisture causing decay. Lime mortars and renders are more flexible allowing for a greater degree of movement and thermal expansion.

The oak mid-rails appear in a much better condition than the soleplates, partly due to being away from the ground and rising dampness and partly due to the render finish immediately above the mid-rail in areas being angled to allow rainwater to runoff from the top face of the mid-rail.

Ideally the existing masonry should be removed and replaced with wattle and daub and lime rendered or alternatively, the blockwork removed and reconstructed with a lime mortar and render. This would add significantly to the works. Perhaps a more economical solution would be to provide a lime mortar packing between the blockwork and the replacement outer half of the soleplate and, over time, where the masonry and render above is repaired, use a lime based mortar and render.





NOTCH

POORLY
LOCATED
SPLICE
INVESTIGATE

HISTORIC
HALF LAP
OR NOTCH

90mm
DEEP
SPLIT

PATCH TO
MORTICE,
SQUINT-
BUTTS

125mm
DECAY

PATCH TO
MORTICE,
SQUINT-
BUTTS

WEAK MORTICE
SIDE FACE

1.5mm
CRACK

145mm
DEEP
MORTICE

115mm
DEEP
MORTICE

60mm
DEEP
SPLITS

HISTORIC
HALF LAP
OR NOTCH

135mm
DEEP
MORTICE

125mm
DEEP
MORTICE

MINOR
SURFACE/
EDGE
DECAY

20mm
EDGE
DECAY

SPLIT
TENON
IF
REQUIRED

SPLIT
TENON
IF
REQUIRED

140mm
DECAY

THIN RENDER
PULLING AWAY

120mm
DEEP
SPLIT

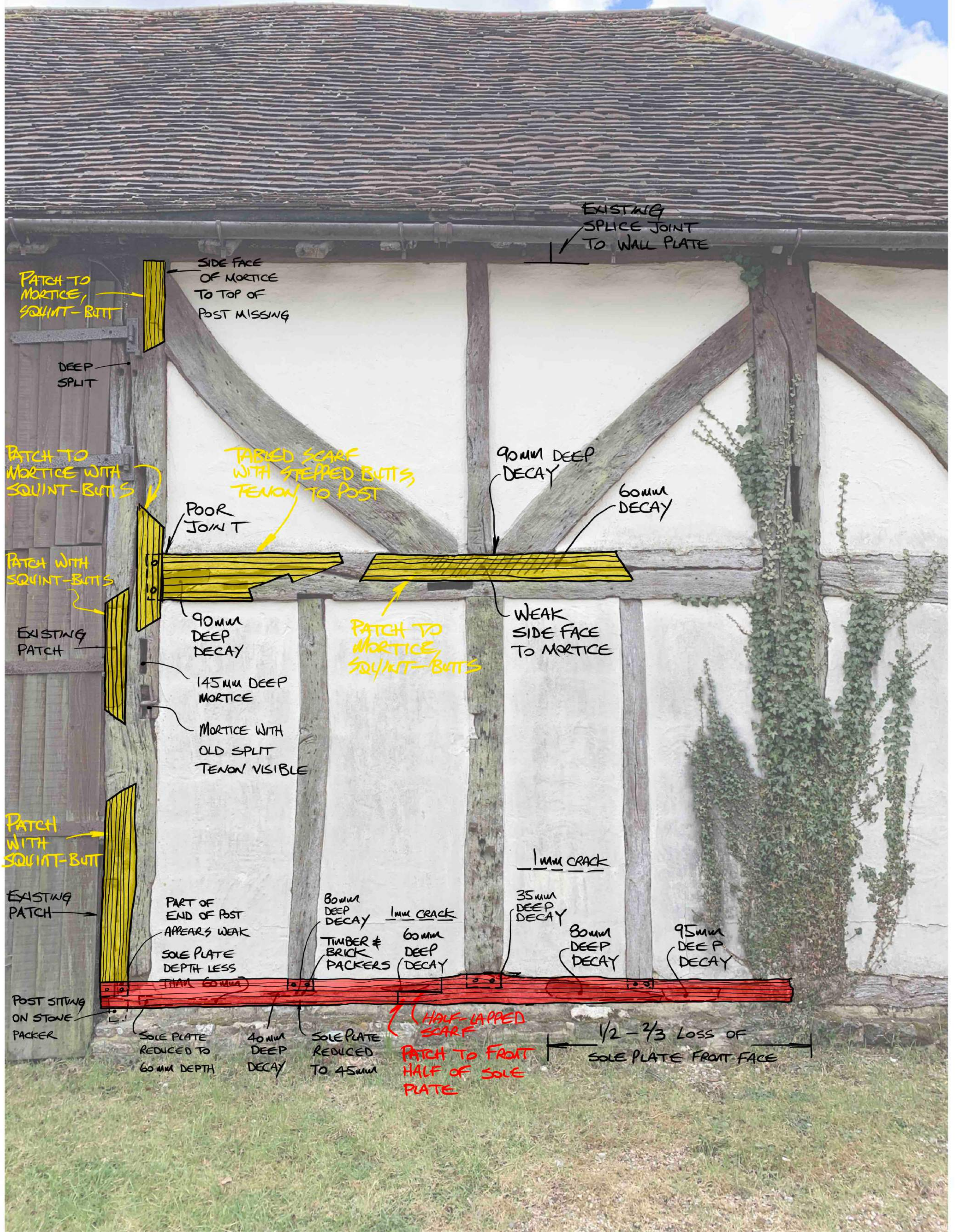
STONE
PLINTH

25mm
END/EDGE
DECAY TO
POST

PATCH TO
FRONT HALF
OF SOLE PLATE

HALF-LAPPED
SCARF





EXISTING
SPICE JOINT
TO WALL PLATE

PATCH TO
MORTICE,
SQUINT-BUTT

SIDE FACE
OF MORTICE
TO TOP OF
POST MISSING

DEEP
SPLIT

PATCH TO
MORTICE WITH
SQUINT-BUTTS

TABLED SCARF
WITH STEPPED BUTTS,
TENON TO POST

90MM DEEP
DECAY

60MM
DECAY

POOR
JOINT

PATCH WITH
SQUINT-BUTTS

EXISTING
PATCH

90MM
DEEP
DECAY

145MM DEEP
MORTICE

MORTICE WITH
OLD SPLIT
TENON VISIBLE

PATCH TO
MORTICE
SQUINT-BUTTS

WEAK
SIDE FACE
TO MORTICE

PATCH
WITH
SQUINT-BUTT

EXISTING
PATCH

PART OF
END OF POST
APPEARS WEAK

SOLE PLATE
DEPTH LESS
THAN 60MM

80MM
DEEP
DECAY

TIMBER &
BRICK
PACKERS

1mm CRACK
60MM
DEEP
DECAY

35MM
DEEP
DECAY

80MM
DEEP
DECAY

95MM
DEEP
DECAY

POST SITTING
ON STONE
PACKER

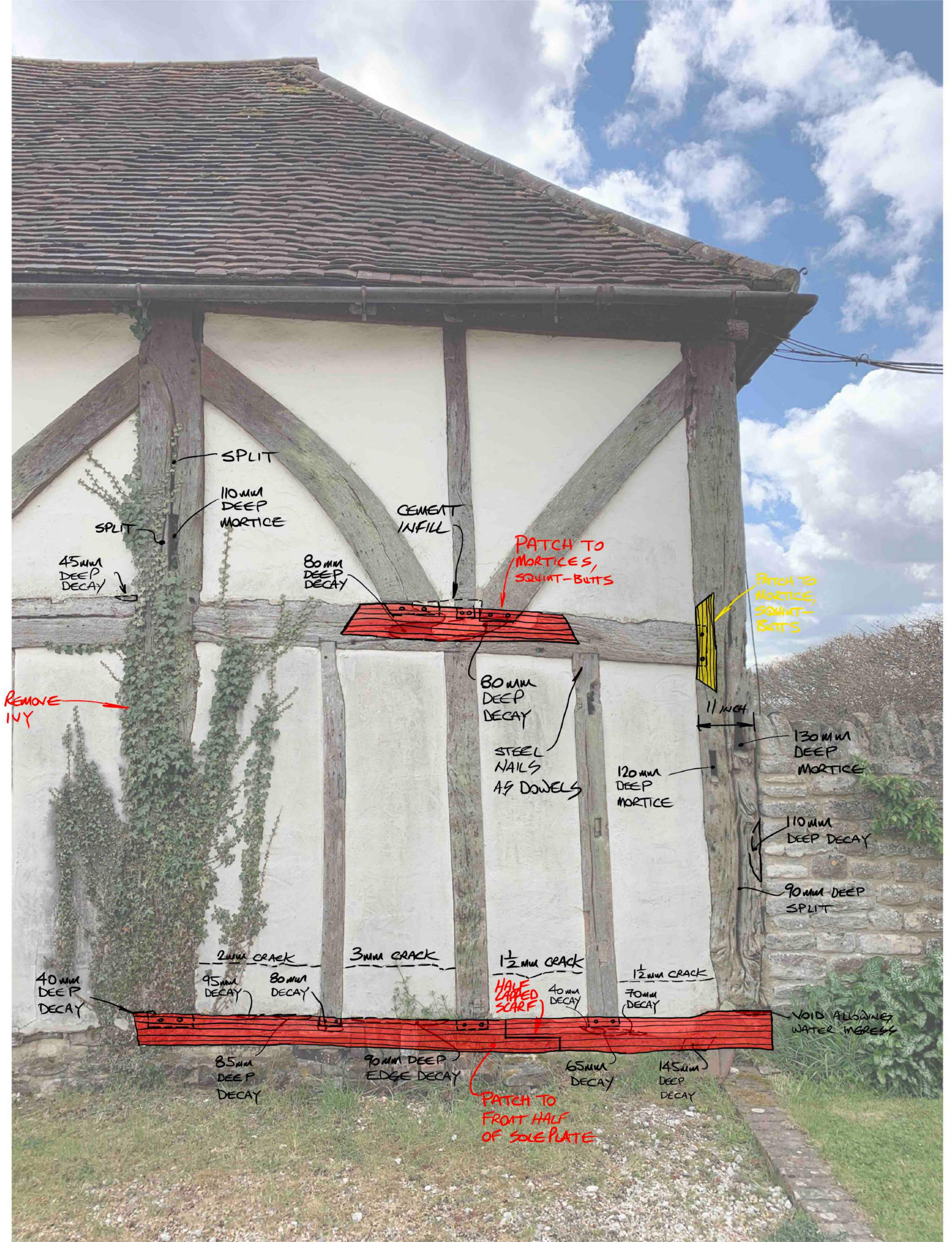
SOLE PLATE
REDUCED TO
60MM DEPTH

40MM
DEEP
DECAY

SOLE PLATE
REDUCED
TO 45MM

HALF-LAPPED
SCARF
PATCH TO FRONT
HALF OF SOLE
PLATE

1/2 - 2/3 LOSS OF
SOLE PLATE FRONT FACE



SPLIT

110mm DEEP MORTICE

CEMENT INFILL

PATCH TO MORTICES, SQUINT-BUTTS

PATCH TO MORTICE, SQUINT-BUTTS

SPLIT

45mm DEEP DECAY

80mm DEEP DECAY

80mm DEEP DECAY

STEEL NAILS
45 DOWELS

120mm DEEP MORTICE

130mm DEEP MORTICE

110mm DEEP DECAY

90mm DEEP SPLIT

REMOVE IVY

11 INCH

2mm CRACK

3mm CRACK

1 1/2 mm CRACK

1 1/2 mm CRACK

40mm DEEP DECAY

95mm DECAY

80mm DECAY

40mm DECAY
HALF LAPPED SCARF

70mm DECAY

VOID ALLOWING WATER INGRESS

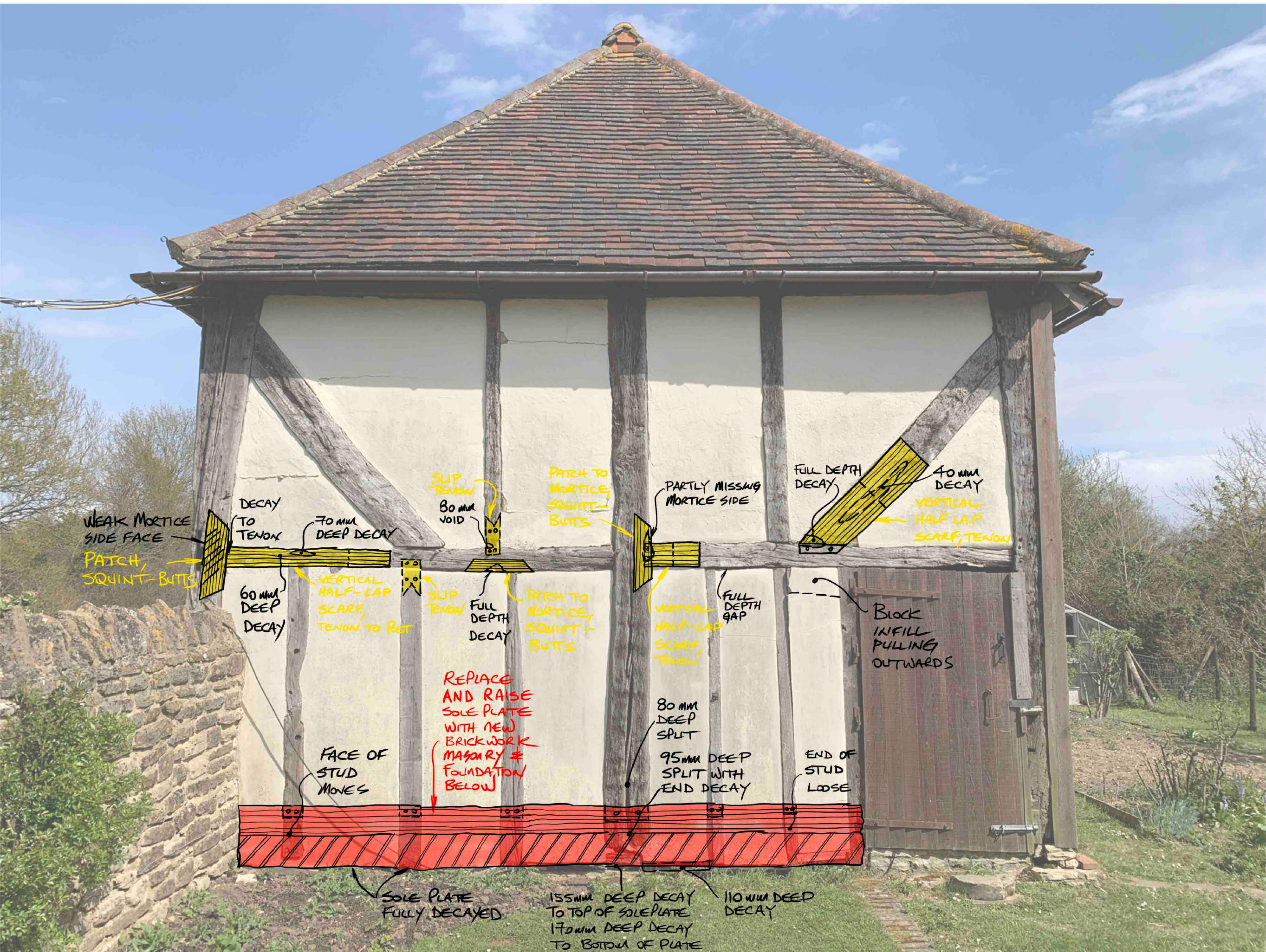
85mm DEEP DECAY

90mm DEEP EDGE DECAY

65mm DECAY

145mm DEEP DECAY

PATCH TO FRONT HALF OF SOLE PLATE



WEAK MORTICE
SIDE FACE
PATCH,
SQUINT-BUTTS

DECAY
TO
TENON

70mm
DEEP DECAY

60mm
DEEP
DECAY

VERTICAL
HALF-LAP
SCARF,
TENON TO POST

SLIP
TENON
80mm
VOID

SLIP
TENON

FULL
DEPTH
DECAY

PATCH TO
MORTICE,
SQUINT-
BUTTS

PATCH TO
MORTICE,
SQUINT-
BUTTS

PARTLY MISSING
MORTICE SIDE

VERTICAL
HALF-LAP
SCARF,
TENON

FULL
DEPTH
GAP

FULL DEPTH
DECAY

40mm
DECAY

VERTICAL
HALF LAP
SCARF, TENON

BLOCK
INFILL
PULLING
OUTWARDS

FACE OF
STUD
MOVES

REPLACE
AND RAISE
SOLE PLATE
WITH NEW
BRICKWORK
MASSORY &
FOUNDATION
BELOW

80mm
DEEP
SPLIT

95mm DEEP
SPLIT WITH
END DECAY

END OF
STUD
LOOSE

SOLE PLATE
FULLY DECAYED

155mm DEEP DECAY
TO TOP OF SOLE PLATE
170mm DEEP DECAY
TO BOTTOM OF PLATE

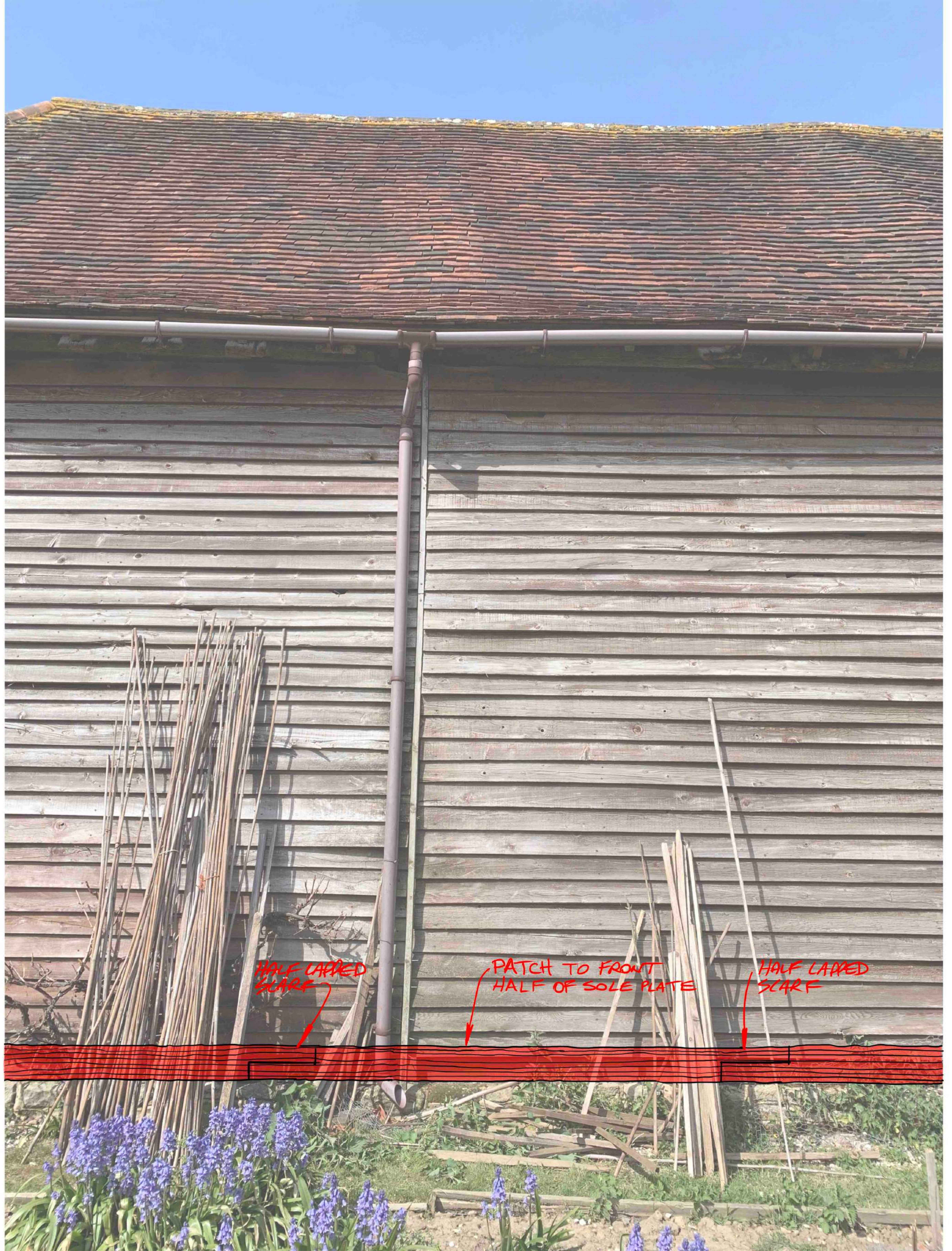
110mm DEEP
DECAY



PATCH TO FRONT
HALF OF SOLE PLATE

HALF-LAPPED
SCARF

HALF-LAPPED
SCARF



HALF LAPPED
SCARF

PATCH TO FRONT
HALF OF SOLE PLATE

HALF LAPPED
SCARF



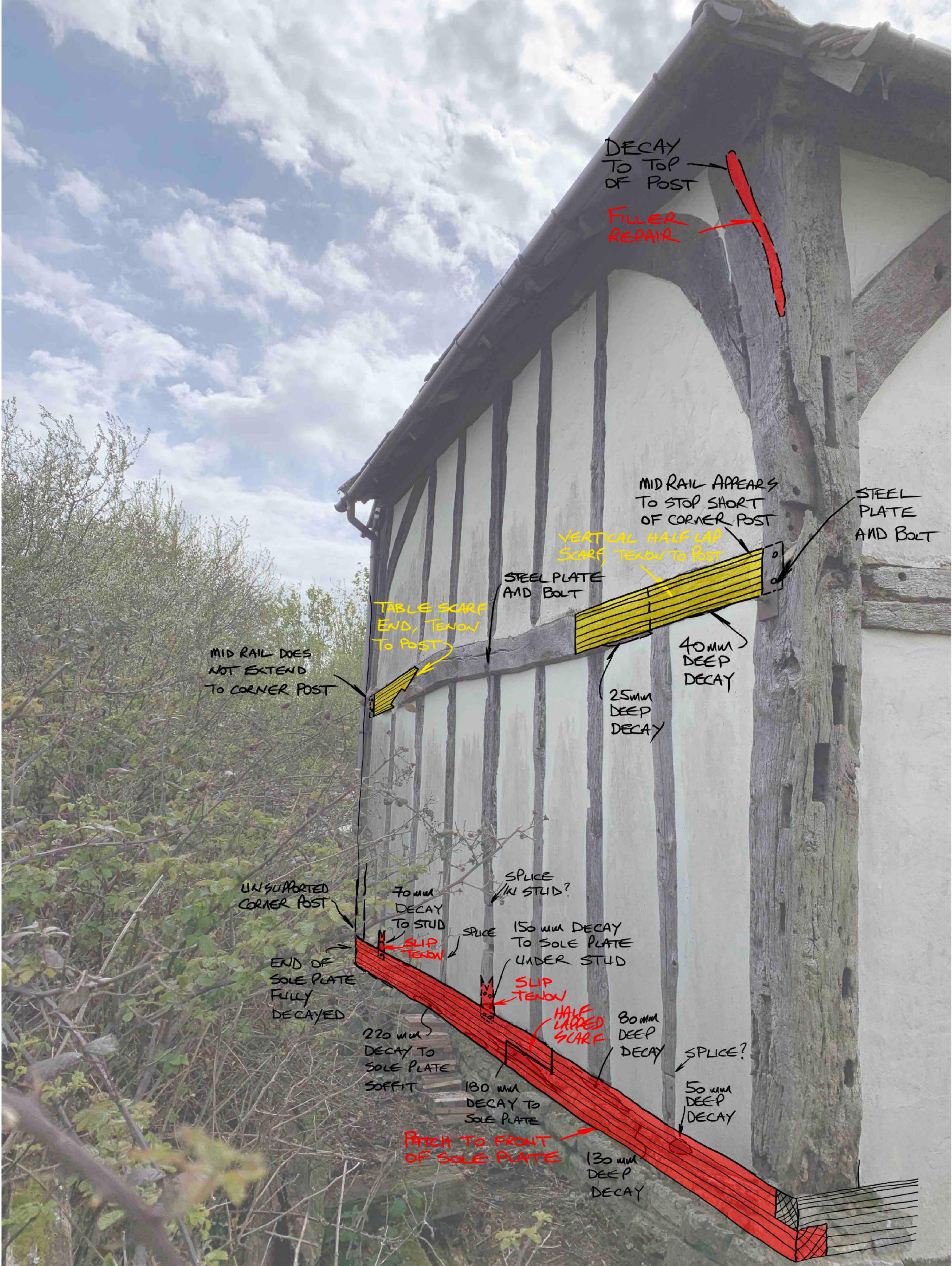
HALF-LAPPED
SCARF

PATCH TO FRONT
HALF OF SOLE PLATE

HALF-LAPPED
SCARF

PATCH TO FRONT
HALF OF SOLE PLATE

HALF-LAPPED
SCARF



DECAY TO TOP OF POST

FILLER REPAIR

MID RAIL APPEARS TO STOP SHORT OF CORNER POST

STEEL PLATE AND BOLT

VERTICAL HALF LAP SCARF, TENON TO POST

STEEL PLATE AND BOLT

TABLE SCARF END, TENON TO POST

MID RAIL DOES NOT EXTEND TO CORNER POST

40mm DEEP DECAY

25mm DEEP DECAY

UNSUPPORTED CORNER POST

70mm DECAY TO STUD

SPLICE IN STUD?

SPLICE

150mm DECAY TO SOLE PLATE UNDER STUD

END OF SOLE PLATE FULLY DECAYED

SLIP TENON

SLIP TENON

HALF LAP SCARF

80mm DEEP DECAY

SPLICE?

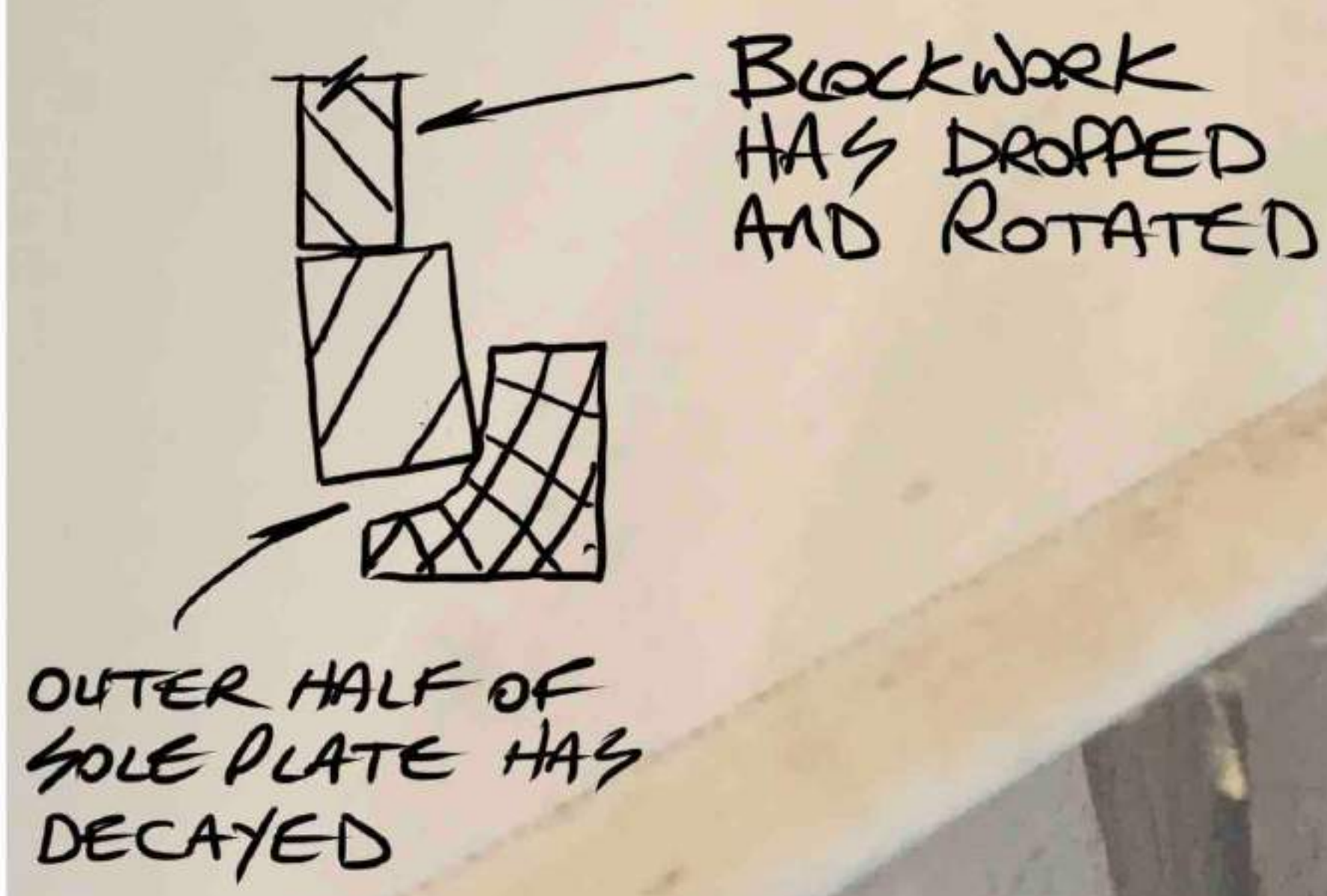
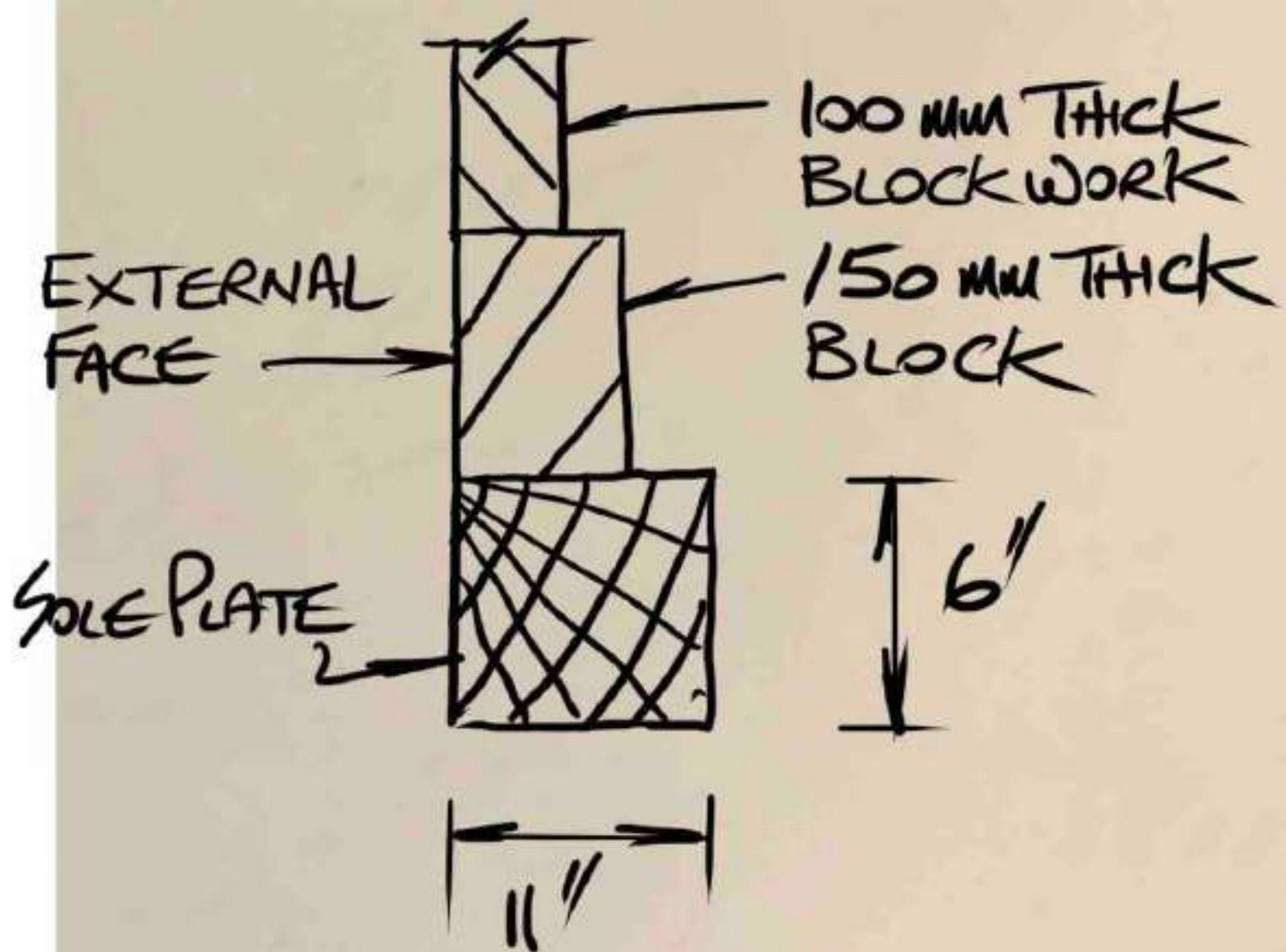
220mm DECAY TO SOLE PLATE SOFFIT

180mm DECAY TO SOLE PLATE

50mm DEEP DECAY

PATCH TO FRONT OF SOLE PLATE

130mm DEEP DECAY



LOSS OF OUTSIDE
HALF OF SOLE PLATE
GENERALLY

REPLACE
AND RAISE
SOLE PLATE
WITH NEW
BRICKWORK
AND FOUNDATION
BELOW

DECAY TO
END OF POST
AT OUTSIDE
FACE

LOSS OF OUTSIDE
HALF OF SOLE PLATE
GENERALLY

BOTTOM OF SOLE PLATE
IS AT EXTERNAL
GROUND LEVEL

10"x10"
POST

KNEE
BRACE
MISSING
TO POST

NEW DRAGON
TIE

LOCALISED
FULL DEPTH
DECAY.
BIRDS NEST

50mm
DEEP
DECAY

FILLER
REPAIR

EDGE DECAY
TO STUD

POSSIBLE POOR
TENON JOINT TO
MID RAIL
INVESTIGATE

EDGE
DECAY
TO STUD

SLIP
TENON

EXTERNAL
FACE OF
SOLE PLATE
SUPPORTING
STUD HAS
DECAYED.
NO SUPPORT
TO STUD

PATCH TO
OUTER HALF
OF SOLE PLATE

PATCH TO OUTER
HALF OF SOLE PLATE

WALL PLATE
SPICE

WALL PLATE
SPICE

KNEE BRACE
MISSING TO
POST

EXISTING
EXTENSION
OR REPAIR
TO POST

FULL
DECAY
TO POST
CORNER

FULL DEPTH
EDGE DECAY
TO END OF
STUD

SOLE PLATE
SPICE

SLIP
TENDON

PATCH TO OUTER
HALF OF SOLE
PLATE

Joint POSSIBLE
EXISTING
JOINT

SIDE FACE
DECAY TO
MORTICE
TO
MORTICE

BOTTOM OF
STUD
SLIGHTLY
LOOSE
POSS
SLIGHTLY

65mm
DEEP
DECAY

30mm
DEEP
EDGE
DECAY

VERTICAL
MORTICE

65mm
DECAY
TO POSS

PATCH TO OUTER
HALF OF SOLE PLATE

VERTICAL
MORTICE

FULL DEPTH
GAP AT
SOLE PLATE
SPICE

NO KNEE
BRACE
TO POST

POSSIBLE
BROKEN
TENON

TAKEDOWN
AND REBUILD
MASONRY

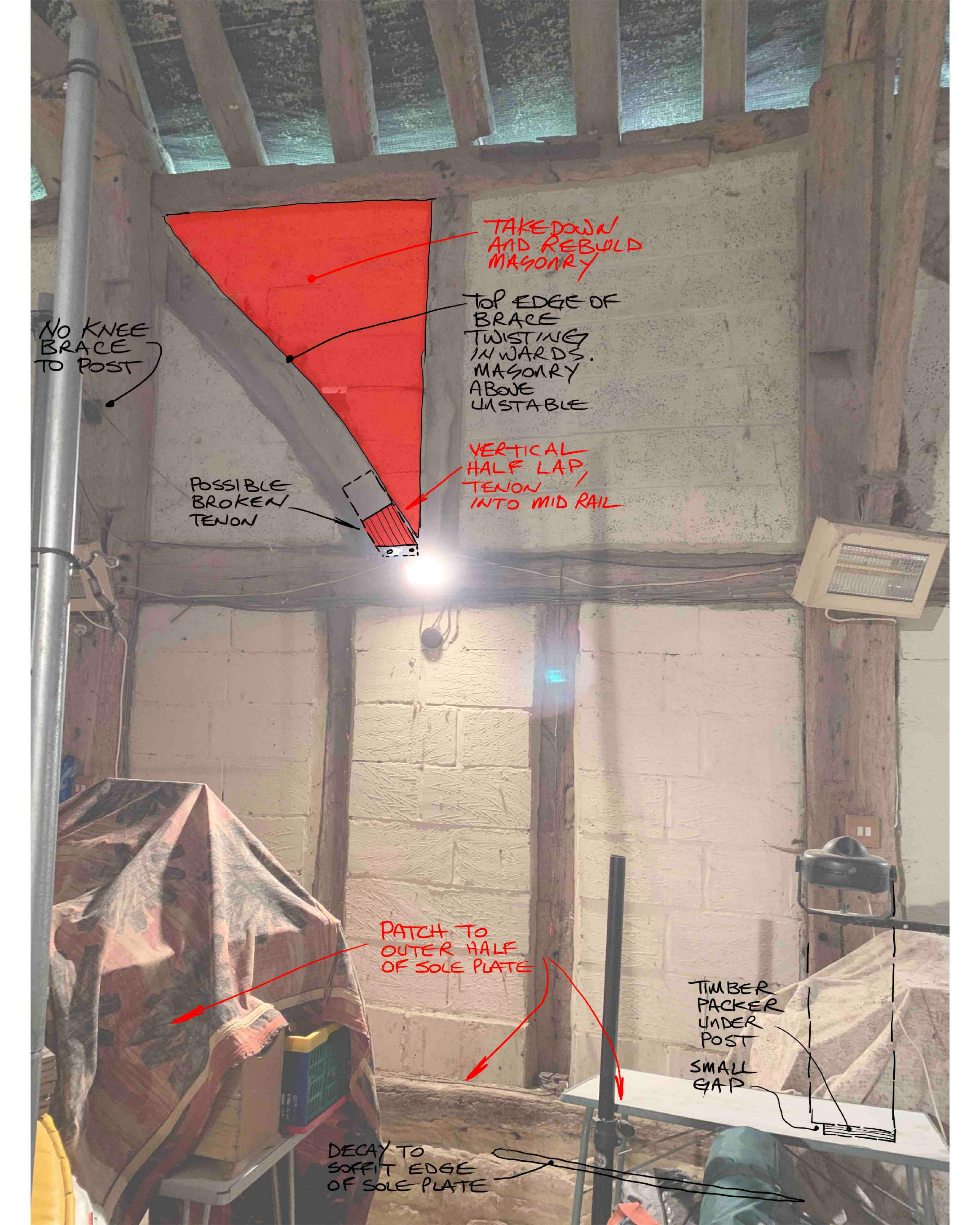
TOP EDGE OF
BRACE
TWISTING
INWARDS.
MASONRY
ABOVE
UNSTABLE

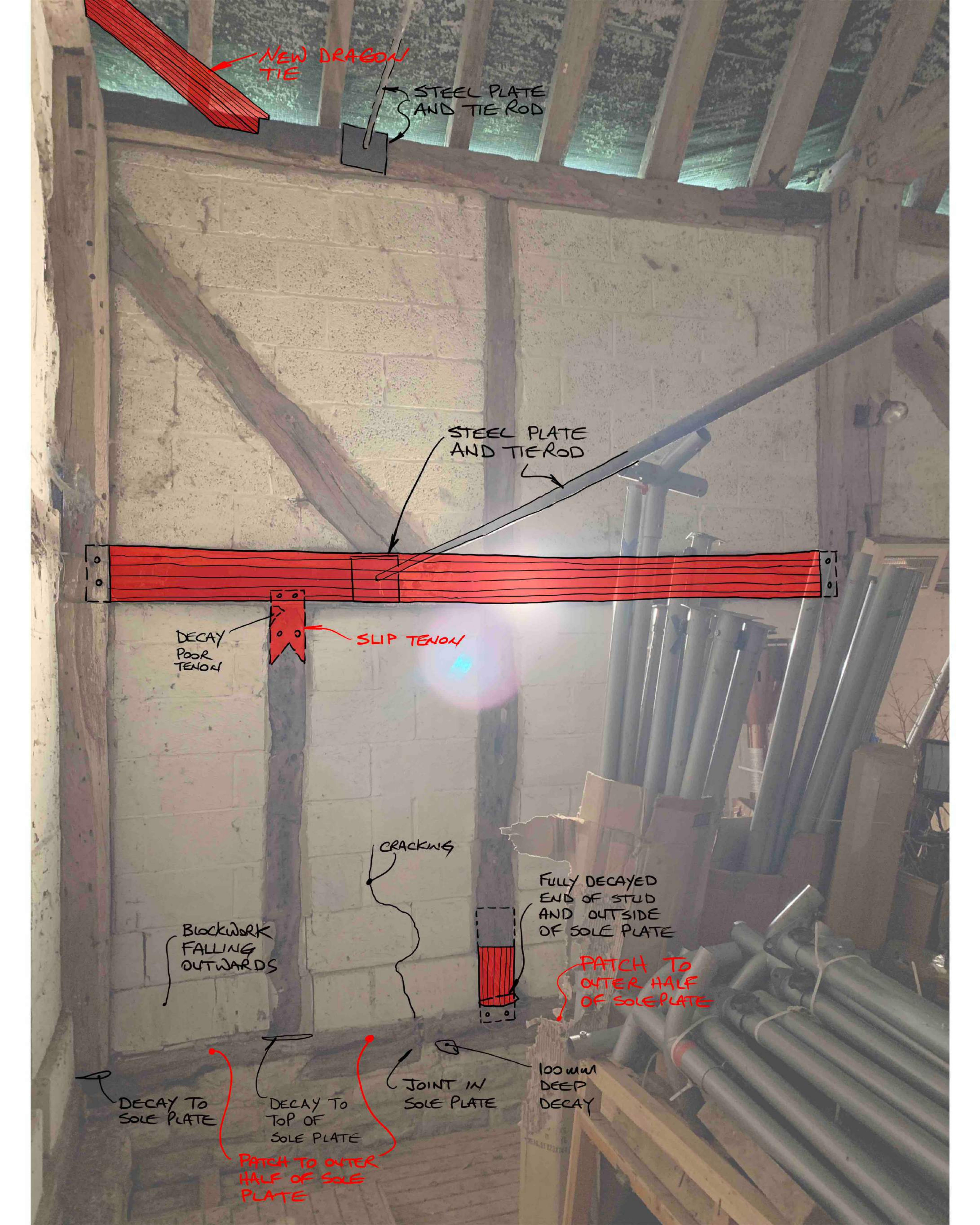
VERTICAL
HALF LAP,
TENON
INTO MID RAIL

PATCH TO
OUTER HALF
OF SOLE PLATE

DECAY TO
SOFIT EDGE
OF SOLE PLATE

TIMBER
PACKER
UNDER
POST
SMALL
GAP





NEW DRAGON TIE

STEEL PLATE AND TIE ROD

STEEL PLATE AND TIE ROD

DECAY POOR TENON

SLIP TENON

CRACKING

BLOCKWORK FALLING OUTWARDS

FULLY DECAYED END OF STUD AND OUTSIDE OF SOLE PLATE

PATCH TO OUTER HALF OF SOLE PLATE

DECAY TO SOLE PLATE

DECAY TO TOP OF SOLE PLATE

JOINT IN SOLE PLATE

100mm DEEP DECAY

PATCH TO OUTER HALF OF SOLE PLATE

NEW TIE
DRAGON

POOR SPLICE
TO END OF
GIRDING/MID
RAIL

SPLICE
EXTENSION
TO POST

EXISTING
CEMENT
INFILL

DECAY TO
SOLE PLATE
UNDER
STUD

40mm DEEP
EDGE DECAY

PATCH TO OUTER
HALF OF SOLE PLATE

SPLIT TO
TOP OF
POST

POSSIBLE
POOR
JOINT
INVESTIGATE

OLD FRAME
POST WITH
HAUNCH

25MM
DEEP
DECAY

POSSIBLE
EXISTING
STUD
EXTENSION

PATCH TO OUTER
HALF OF SOLE PLATE

MISSING
DIAGONAL
KNEE
BRACE
TO POST

NEW MID RAIL

POOR
TENON
JOINT

POSSIBLE
STUD SPLICE

PATCH TO OUTER
HALF OF SOLE PLATE

POST TENON
DECAYED

DECAY TO
TOP OF
SOLE PLATE

DECAY TO
TOP OF
SOLE PLATE

DECAY TO
TOP OUTER
SIDE OF
SOLE PLATE

TENON TO WALL
PANEL BRACE
DECAYING

VERTICAL
HALF-LAP
SCARF, TENON

TENON TO
WALL PANEL
BRACE DECAYING

VERTICAL HALF
LAP SCARF,
TENON TO POST

INSIDE FACE OF
SOLE PLATE
PARTIALLY MISSING



POST OVERHANGS
INSIDE FACE OF
SOLE PLATE DUE
TO DECAY OF PLATE
20-25mm

MISSING
KNEE
BRACE

SPLIT

PATCH TO OUTER
HALF OF SOLE PLATE

CRACK TO
STONEWORK
UNDER
SOLE PLATE

MAKE
GOOD
STONEWORK

MISSING
WALL PANEL
BRACE

NEW DIAGONAL
BRACE TO WALL
PANEL

DECAY TO
END OF
STUD

DECAY TO
END OF
STUD

PATCH TO OUTER
HALF OF SOLE PLATE



NEW KNEE
BRACE

NEW KNEE
BRACE

DIAGONAL
KNEE BRACE
TO FRAME
MISSING

