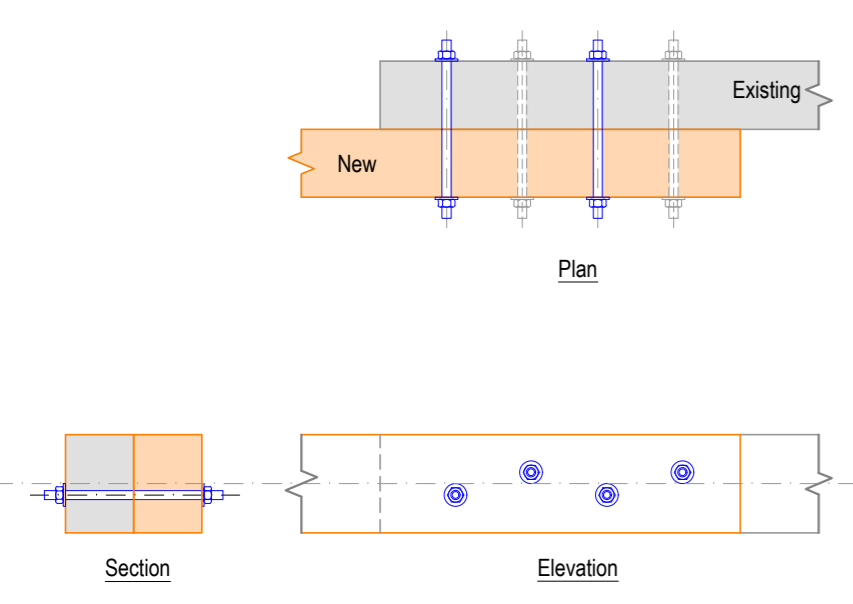
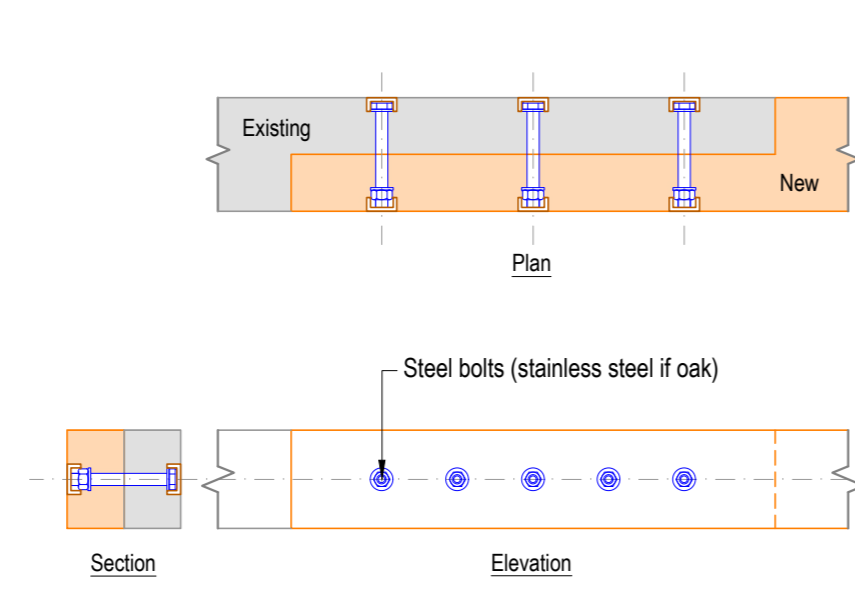


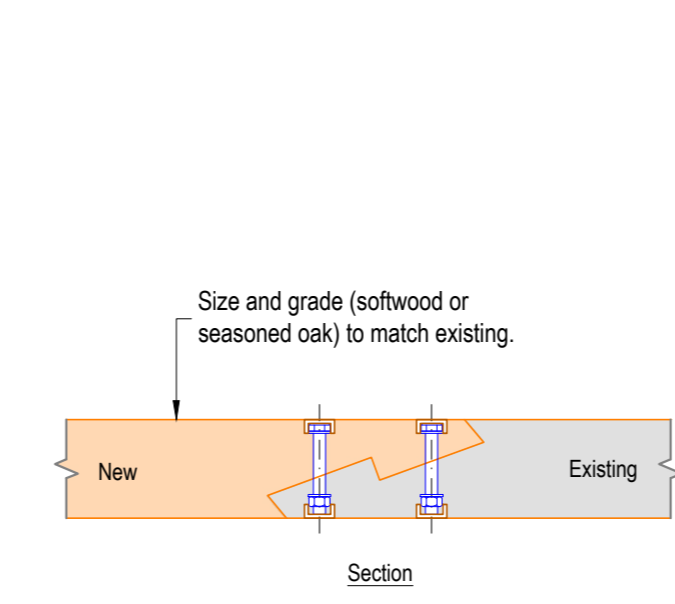
01 First floor plan with indicative location of the roof structural elements
Scale: 1:100



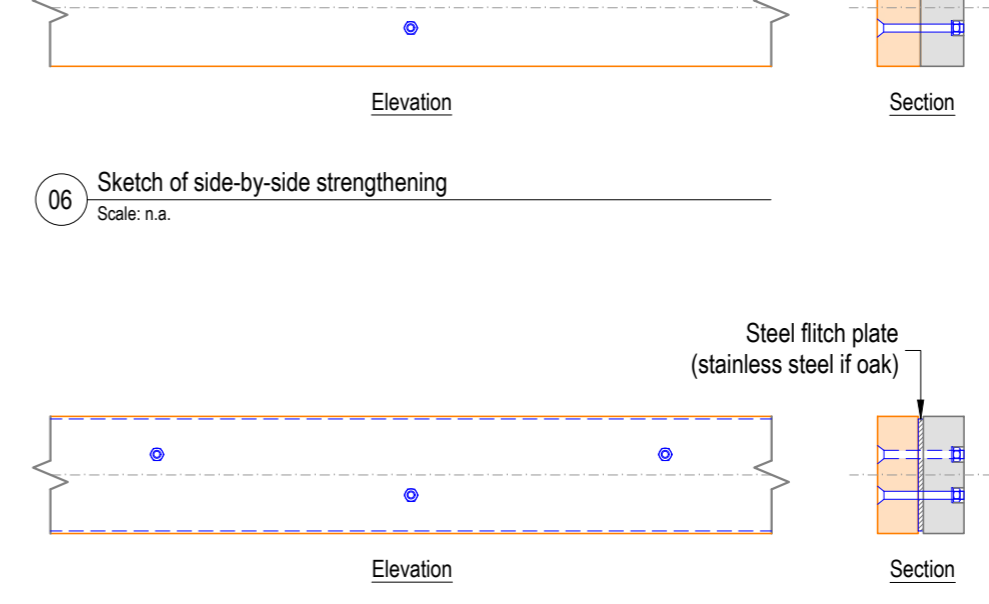
02 Sketch of repair with side-by-side timber
Scale: n.a.



03 Sketch of repair with a half-scarf joint (not suitable for rafters).
Scale: n.a.



04 Sketch of repair with splayed scarf joint (not suitable for rafters)
Scale: n.a.



05 Sketch of flitch plate repair (not suitable for rafters)
Scale: n.a.

Consolidation of chimney stacks, which may include repointing with an approved lime-based mortar, stitching with stainless steel bars, and/or local rebuilding, subject to the findings of the high-level inspection. Repairs to aim at minimising the loss of existing fabric.

Cleaning and application of a protective coating to existing metal ties. If this is not possible due to decay, replacement of the metal tie with a stainless steel rod and plates.

Minor repairs to all trusses are expected such as face patch repairs, new oak pegs or stainless steel bolts (where required), stitching of splits with stainless steel screws.

Following slate removal, close inspection of exposed truss bearings may identify significant timber decay. Allow for cutting back and splice repairs with stainless steel plates and bolts, if required. Refer to detail 07 for reference.

Consolidation of chimney stacks, which may include repointing with an approved lime-based mortar, stitching with stainless steel bars, and/or local rebuilding, subject to the findings of the high-level inspection. Repairs to aim at minimising the loss of existing fabric.

Cleaning and application of a protective coating to existing metal ties. If this is not possible due to decay, replacement of the metal tie with a stainless steel rod and plates.

Roof and ceiling structure above Gallery 003 GAL requires safe access to take measurements and carry out structural assessment to develop targeted remedial works to purlins, collar ties, or beams in this area.

Repair and/or strengthening of existing ceiling beams, purlins, and other roof timbers, using sympathetically designed interventions to minimise the loss of original timber fabric. Preference should be given to traditional timber repair techniques where appropriate, particularly in areas exposed to visitors. Alternative options: concealed stainless steel flitch plate repairs or side-by-side timber repairs. Refer to sketch details 02 to 06.

- Allow for repairs/strengthening as follows (estimated quantities):
- 4no. ceiling beams
 - 30% of ceiling joists
 - 30% of purlins
 - 30% of ridge beams
 - 30% of rafters and rafters' feet
 - 50% of wall plates (allow for half-lap joints with resin anchors to fix the new sections to the wall)
 - 50% of valleys, and hip rafters.

For short lengths of ceiling joists, ridges, wall plates, and rafters, replacement of the timber member may be considered where the scarf joint requires more than 50% of the total length.

Key of interventions

- Areas of proposed works subject to findings of ongoing monitoring
- Areas of proposed works required
- Areas of proposed roof structure repairs required
- Areas of proposed works to be confirmed (further structural assessment required)

Key of roof structural elements

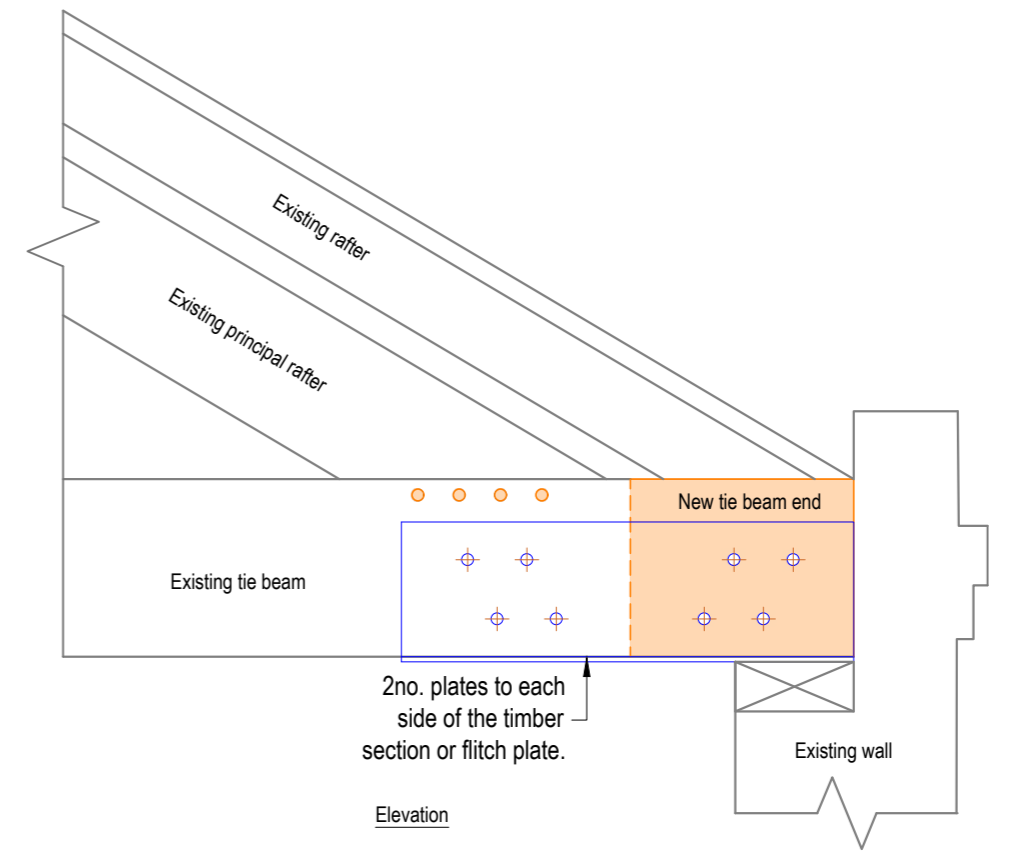
- Timber truss
- Timber ceiling beam
- Timber ridge, valleys and hips

Notes

- This drawing is subject to copyright and must not be reproduced, stored or transmitted in any form without prior permission from Mason Clark Associates.
- This drawing is not to be scaled. All dimensions are to be checked on site by the contractor. Any discrepancies are to be notified to Mason Clark Associates. Obtain instructions prior to works commencing.
- This drawing is to be read in conjunction with all the relevant contract drawings and specifications.
- All dimensions are in millimetres and all levels are in metres AOD unless noted otherwise.
- All work shall be carried out in accordance with Local Authority, Statutory Authority and Health & Safety Regulations.
- Mason Clark Associates are not responsible for determining the appropriate fire period, fire boundary conditions or the associated design of fire protection or inherent fire resistance to any elements of structure, including all frames, posts, beams, joists, roof members and secondary structural elements such as lintels. Refer to the Architect or Project Manager for this information.

The proposed sketches are indicative and final configuration and number of bolts will depend on the location of the repair and size of members.

Refer to sketch SK006 for details of the proposed approaches to remedial works.



07 Sketch of truss bearing repair
Scale: n.a.

P2	Preliminary issue - For LBC	SM	21.01.2026
P1	Preliminary issue - For comment	SM	05.01.2026
Rev	Details	By	Date

ma Hull +44 (0) 1482 345797
Leeds +44 (0) 113 277 9542
York +44 (0) 1904 438005
www.masonclark.co.uk

masonclarkassociates
civil and structural engineering consultants

Client: Kirklees Council

Project: Oakwell Hall

Title: Proposed structural interventions
Roof level

Drawn: SM Checked: RMP Date: 23.12.2025

Scale @ A2: As noted

Drawing No: 22333-Y-SK-008 Rev: P2