

Job No. 16.749	Drawn DE	Client 4 Handel Street Ltd	david narro associates Consulting Structural & Civil Engineers
Drg No. SK05	Checked	Job Title Staircase at 4 Handel Street, London WC1	
Date Aug 2016	Scale NTS	Sheet Title Stair Repairs	

As possible and with stair fully support on props at all times, carefully jack up existing timberwork to level before other stiffening & strengthening repairs.

Reinforce all junctions between carriage timbers using BAT light duty 60mm x 40mm x 60mm galv MS angle brackets; fix using all screw holes with 50mm long woodscrews

Fit solid raking timbers on line between existing timbers; ensure tight fit and glue & screw (see image - A below)

Fit folding hardwood timber wedges tight between end carriage beam and existing brickwork of wall alongside of stair

On line between carriage timber cut and fit tight triangular boards in 19mm structural plywood to underside of step boards. (see image - B below)

Reinforce connection of carriage beams to landing beams by fixing timber using a BAT heavy duty 90x60x60 galv MS angle bracket screw fixed to carriage beam & with M10 bolt (with 50 x50 plate washers) into landing timber. Carefully as stair is gently jacked up, tighten bolt, drawing timber back together. Otherwise pack with timber wedges any gap between the timbers.

REPAIRS

Indicative at this stage
- to be confirmed once lath & plaster removed from underside of stair and timber supports with stair exposed.

Additional triangular stiffener fitted between underside of timber step boards. Pattern to suit arrangement of carriage timbers once confirmed.

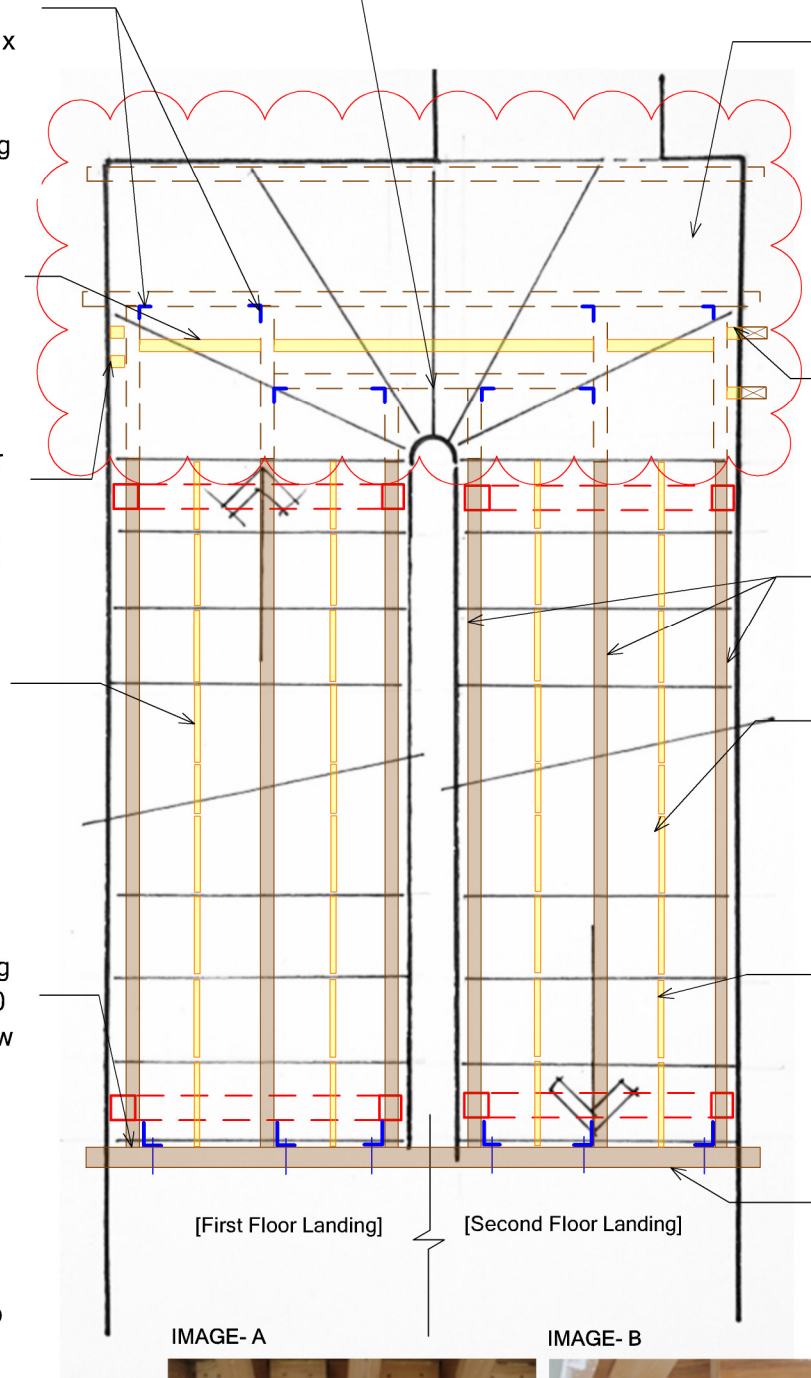
Fit folding hardwood timber wedges tight between end carriage beam and existing studs in partition wall alongside of stair

Existing timber carriage beams

Only upon completion of all repairs and after redecoration works are completed, reinstate carpet, underlay and other finishes on top of stair at this stage

Once all timber stiffening/strengthening repairs completed, reinstate lath & plaster finishes to underside of stair; underside of winder section to follow sweep of original.

Check condition of landing beam and bearings on to wall at either end



Plan of stair between first floor to second floor landings
(not to scale)

For Discussion