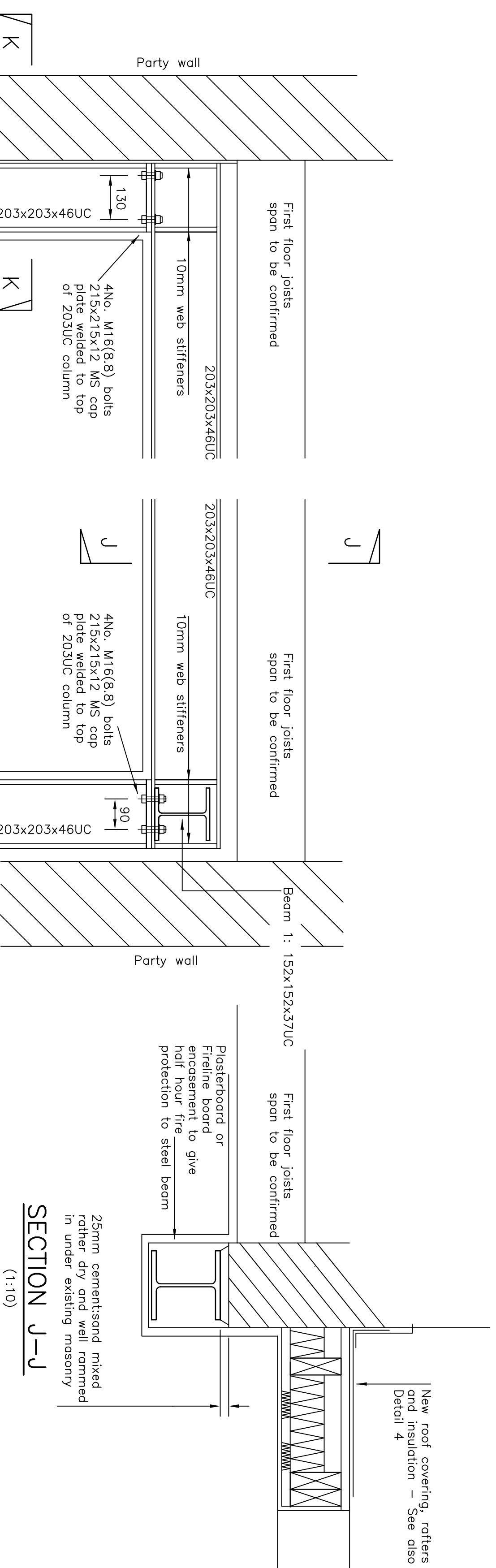


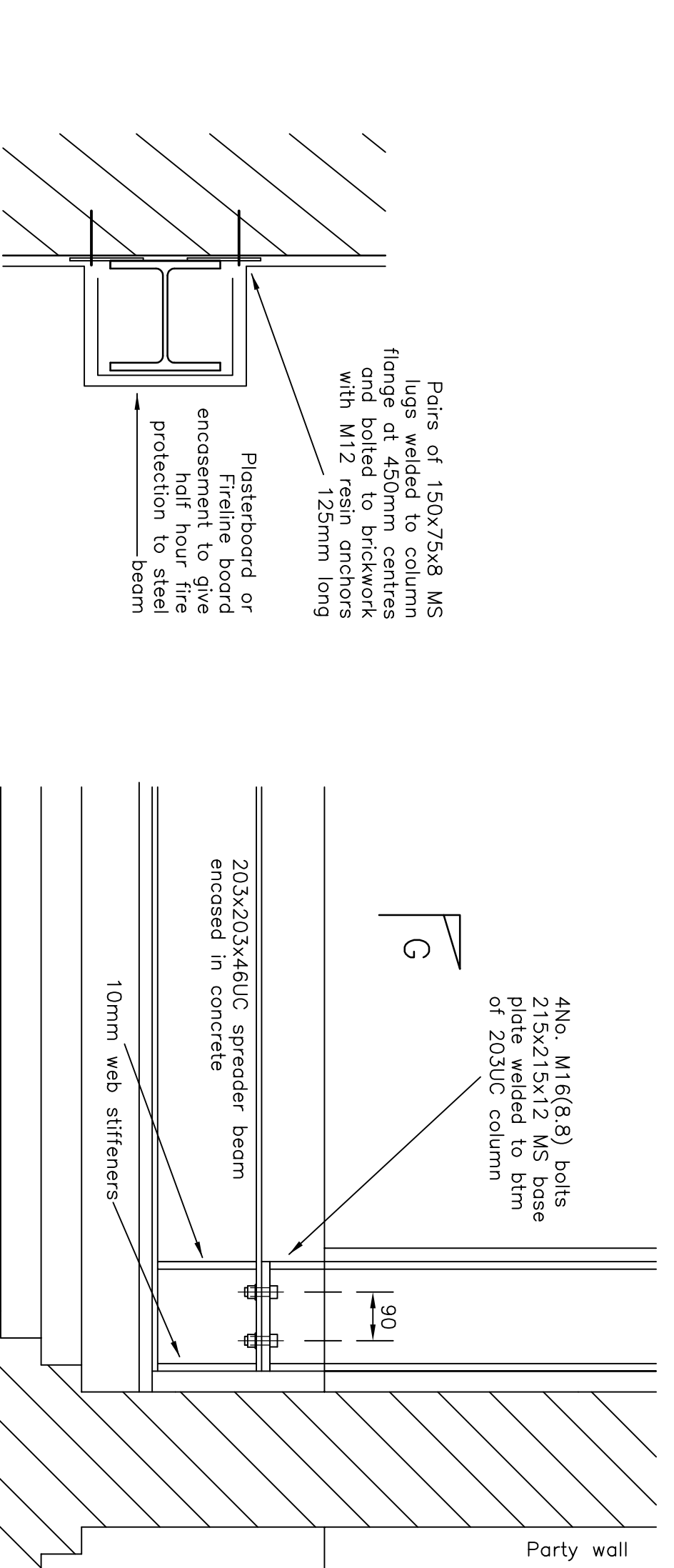
## STRUCTURAL NOTES:



SECTION J-J  
(1:10)

## HEALTH AND SAFETY NOTES

- This drawing must be read in conjunction with all other relevant architects, consultants and structural engineers drawings and specifications and insulation - See also Detail 4.
- Work to figured dimensions only. Do not scale.
- The Contractor must take all necessary precautions to maintain the stability of the existing structure, including all walls, floors, etc. during the course of the works.
- Structural steel to be mild steel grade S275 to BS EN 10025 and fabrication to be in accordance with BS5950.
- All structural steelwork, except where noted, to be wire brushed free from all loose rust, mill scale and other contamination and painted with two coats of zinc phosphate primer before delivery. All damaged surfaces, exposed bolts etc. to be touched up upon completion.
- Steelwork sub-contractor to visit site to take all necessary dimensions to enable him to prepare his shop drawings, copies of which must be submitted to the Engineer for review prior to fabrication.
- All bolts to be grade 8.8 B7P bolts to BS 7221: Part 3.
- All welds to be firm continuous fillet weld except where noted.
- Concrete padstones to be formed with 1:4.5 (all-in aggregate)/mix.
- Excavation for new foundations, IF REQUIRED, to be taken down to firm bearing strata capable of sustaining a safe net bearing pressure of 100 kN/m<sup>2</sup>, to the satisfaction of the Building Inspector and Structural Engineer.
- Bottom of excavation to be approved by Engineer before concrete is placed.
- If foundations are not placed immediately following approval, bottom of trench is to be blinded with 50mm mass concrete.
- All in situ concrete in contact with the ground to be DESIGNATED CONCRETE GEN3 to BS8500.
- Aggregate to be 20mm maximum size and conform to the requirements of the British Standards listed in BS 8500 : 2 ; 2002, 4.3.
- Admixtures for concrete must not be used unless approved by the Structural Engineer. Admixtures containing calcium chloride must not be used.
- The Contractor is to submit ready mix concrete proposals to the Engineer for approval prior to confirming orders for the materials.
- All concrete to be placed using a mechanical immersion vibrator or other means approved by the Engineer to ensure adequate compaction.
- All structural timber to be strength class C24 to BS5628 unless noted otherwise in the Structural Engineers drawings.
- Junctions between timber members to be secured with two 100mm round wire nails (sawg unless noted otherwise, slant driven if necessary).
- All mechanical fixings, ie nails, bolts, screws, etc., to be specified or otherwise suitably protected from corrosion.
- All timber to be treated with approved preservative to BS 5628:Part5.
- Hardcore Filling, if required:  
Hardcore filling to be clean broken brick, stone or concrete capable of posing a 100mm ring, free from all deleterious material, timber, plaster, etc., and compacted in layers not exceeding 150mm thick after compaction, using a vibrating roller or similar approved method.  
Alternative filling can be an inert well graded granular material of maximum size 75mm fully compacted in 150mm layers each layer being given 6 to 8 passes.  
In both cases, final layer to be blinded with sharp sand or crushed fine aggregate to form a level surface with a tolerance of +0 to -25mm.
- Protective Equipment:  
Where there is a risk of being struck by falling materials protective headware ( hard hats ) must be worn  
Where there is a risk of materials being dropped on feet or nails or other sharp objects penetrating the shoe regulation footwear with steel toe caps must be worn  
Where workers are employed on a site with moving vehicles, high visibility clothing must be worn  
Where there is a risk of of flying objects, sparks, air born dust, etc., goggles or safety spectacles must be worn  
For protection against uv radiation from welding specialist goggles or shields are to be used.
- Working at height:  
Ensure that ladders are in good condition, positioned at a 1:4 angle and tied or footed.  
Prevent people and materials falling from roofs, gable ends working platforms and open edges, using guardrails, midrails and toeboards.  
Ensure that fragile roof surfaces are covered, or secure working platforms with guard rails.  
Shoring, excavations:  
Collapse of excavations:  
Support structures ( such as walls, beams, chimney breasts and roofs ) with props: ensure that props are installed by a competent person.
- Exposure to building dusts:  
Prevent dust by using wet cutting and vacuum extraction on tools; use a vacuum cleaner rather than sweeping; use suitable well fitting masks whenever necessary.
- Exposure to asbestos:  
Do not start work if it is suspected that asbestos may be present, until a demolition/returbishment survey has been carried out.
- Electricity:  
Turn off the electricity supply and other services off before drilling into walls.  
Do not use excavators or power tools near suspected buried services.
- Protect members of the public, the client, and others:  
Secure the site, net scaffolds and use rubbish chutes.
- Steel erection:  
Plan for good access & proper standing areas for delivery vehicles.  
Arrange for safe storage of materials  
Programme work to ensure other trades do not work beneath scaffolding  
Arrange for safe working at height, eg mobile platforms or tower scaffolds  
Ensure that steel erectors are experienced and acquainted with all necessary procedures for safe working.  
Arrange for the provision of all necessary mechanical lifting equipment and that the operatives are experienced in the use of such equipment.
- Moving, Lifting and Handling Loads:  
Equipment required for material handling to be decided prior to commencement of the works.  
Minimise risks by avoiding double handling  
Ensure that mechanical handling equipment is only used by trained operatives.  
Arrange for equipment to be regularly inspected and where necessary examined and tested by a competent person.

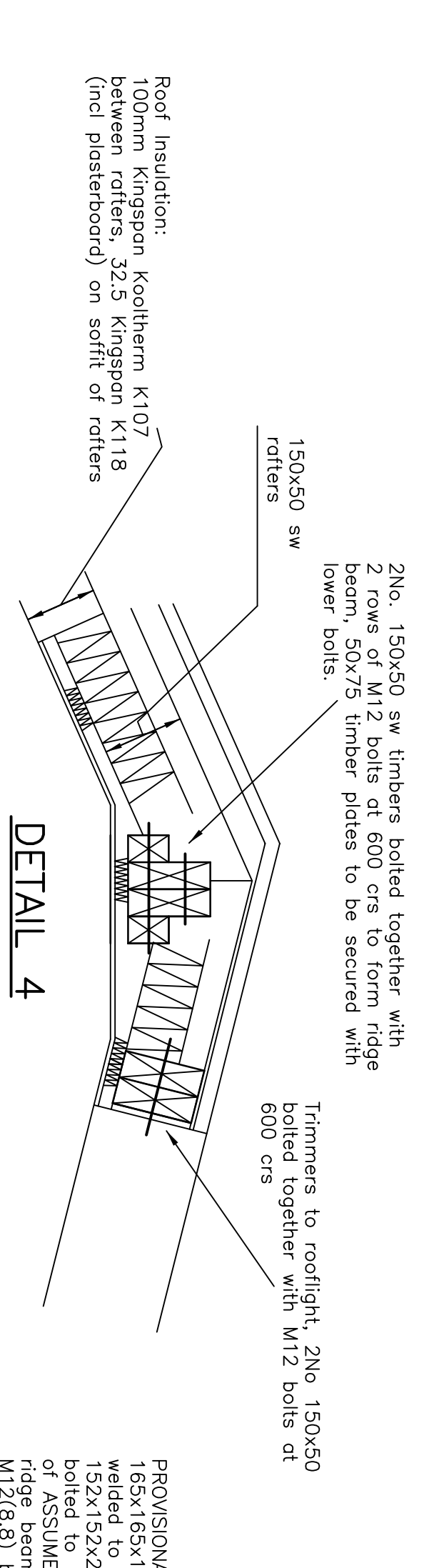


SECTION K-K

## SIMILAR DETAIL OTHER SIDE

DETAIL 3

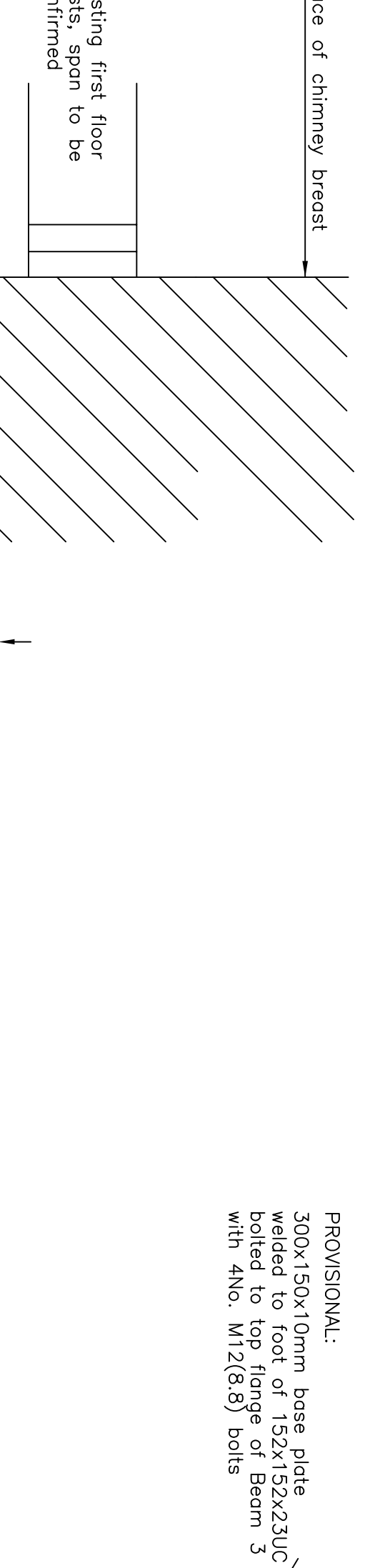
SECTION G-G



DETAIL 4

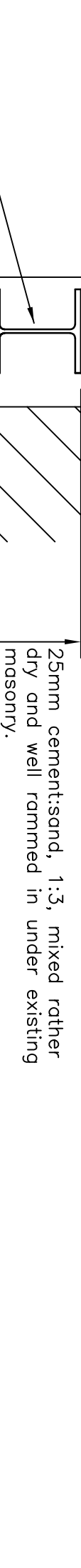
PROVISIONAL:  
165x165x10mm cap plate welded to top of 152x152x23 post and bolted to bottom flange of 300x150x10mm base plate of 152UC with 4No M12(8.8) bolts

PROVISIONAL:  
300x150x10mm base plate welded to foot of 152x152x23UC with 4No. M12(8.8) bolts



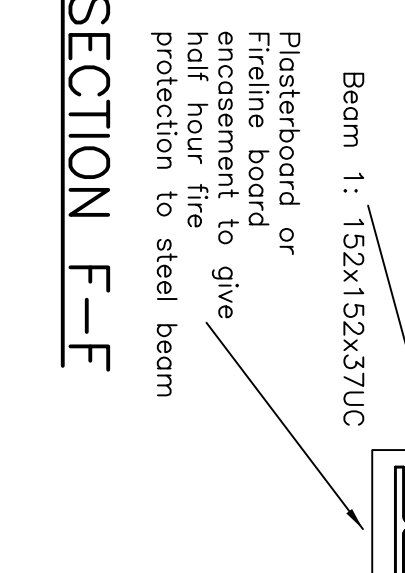
DETAIL 5

SECTION H-H



(PROVISIONAL DETAIL ALL SUBJECT TO CONFIRMATION AFTER OPENING UP)

SECTION H-H



SECTION F-F

FOR LOCATION OF DETAILS 1 TO 5 AND SECTION F-F REFER TO DRAWING 3798/01

0 100 200 400 600 800 1000 1200 1400

1:10 (millimetres)

SCALE BAR

Client	Scale	1:10	Down by	RJT	Date	December 2021
Drawing no.	3798 02	Rev				

9 Gravel Path  
Berkhamsed  
Herts HP4 2EF

Ground Floor  
Alterations  
sheet 2 - Details

Client: Sison Dobson  
9 Grovel Path  
Berkhamsed  
Herts HP4 2EF

3798 02

ROBERT TUCKER  
Consulting Structural Engineer  
10 Icknield Way  
Herts HP23 4ET  
Tel: 01443 891411  
Mobile: 07355 710935