

British Museum – No. 41 Russell Square Planning Submission Statement Prepared for the British Museum July 2018



British Museum – No. 41 Russell Square

Planning Submission Statement

1.0 Introduction

No. 41 Russell Square is a terraced house owned by the British Museum and is located to the south-west of Russell Square. The house was built in the early 1800's and is Grade II listed. The British Museum currently uses this building as offices. We are working with PRS Architects and Frankham (M&E engineers) to refurbish and repair this building for continued use as offices. We were previously involved on a refurbishment project of adjacent No. 42 in the 1980's. These notes have been prepared to record the main aspects of the structural engineering refurbishment works.

2.0 Site Investigations and Surveys

Targeted local opening up works have been carried out to date to confirm the general structural arrangement and condition of the existing structure. The findings of these investigations are summarised on the existing structure drawings. Refer to drawings in Appendix 3 for details of investigations.

During our site visits to look at the opening up works, we noticed some local timber decay to the rear balcony and to the roof. A timber survey will be carried out by a specialist to confirm the extent of decay in these areas, so that appropriate repair details can be prepared.

We know from our previous involvement with No. 42 that there have been issues with delamination of the external walls. There are signs of some bulging to the external walls in places and a survey of the verticality of these has therefore been carried out to confirm their profile.

A CCTV survey of the below ground drainage has also been carried out.



Figure 1: View of Russell Square buildings



Figure 2: OS map (1824)

Location of No. 41

3.0 Summary of the Existing Structure

This building is typical of a late Georgian terrace. It is 4 stories above ground with a basement beneath. There are light-wells at the front and rear, with cellars under the street beyond the front light-well.

The external and party walls and internal basement walls are loadbearing masonry. There are small store rooms centrally in the basement. The internal walls are generally timber above the ground floor.

The floor and roof structures are all timber. At ground level the floor is generally timber joisted and spans over the basement walls. There are masonry vaults beneath the ground floor joists above the store rooms and also above the cellars under the street. The remaining floors generally comprise primary beams supporting secondary beams that in turn support joists. The primary beams generally span between party walls. The roof is pitched with a hip at the rear of the building. There is a flat roof and skylight over the stairwell adjacent to No. 42.

Based on our desk study of available site investigation reports undertaken at the British Museum, the foundations are around 0.6m – 1m deep and founded in gravels.

The opening up work showed that the floors of the house have generally been strengthened in the past with steel angles fixed to the sides of the timber beams, as shown on the existing structure drawings in Appendix 1.

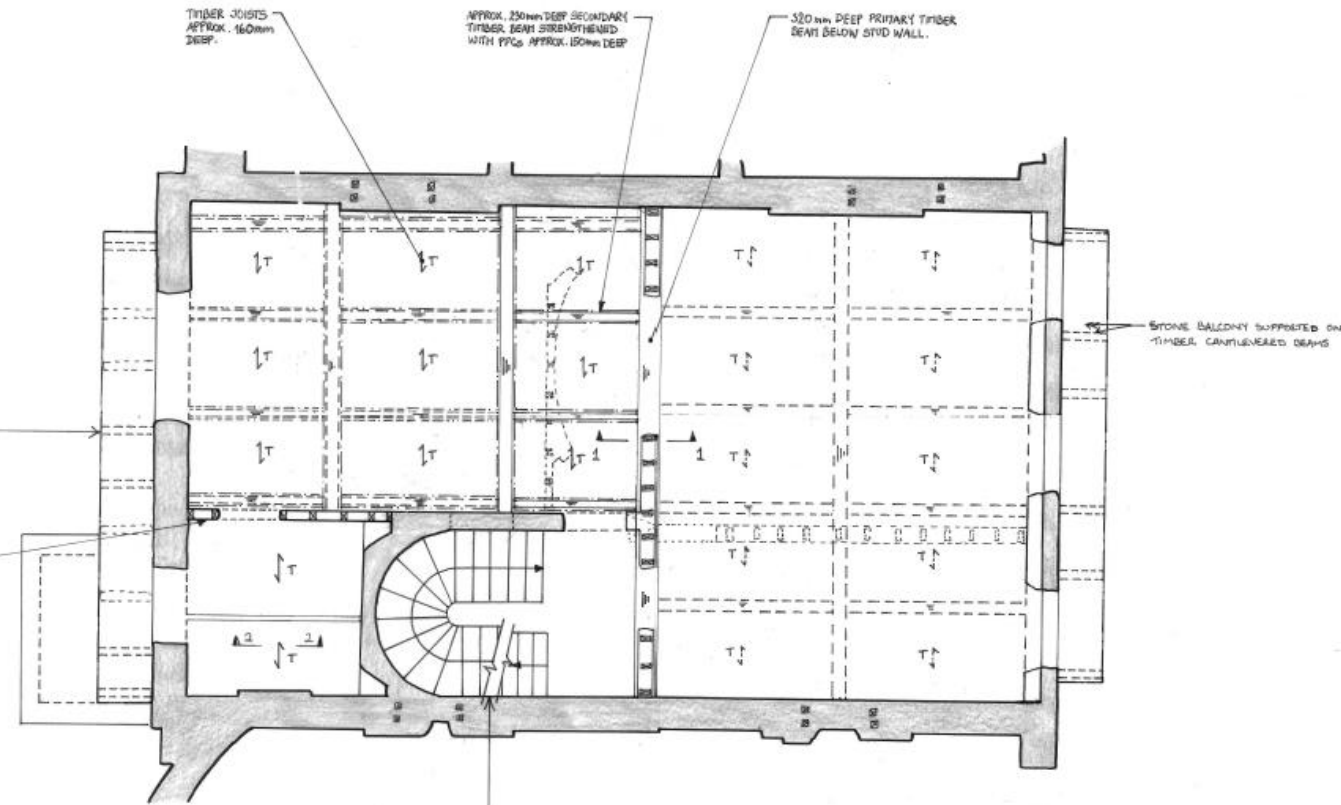


Figure 3: No. 41 first floor showing strengthening

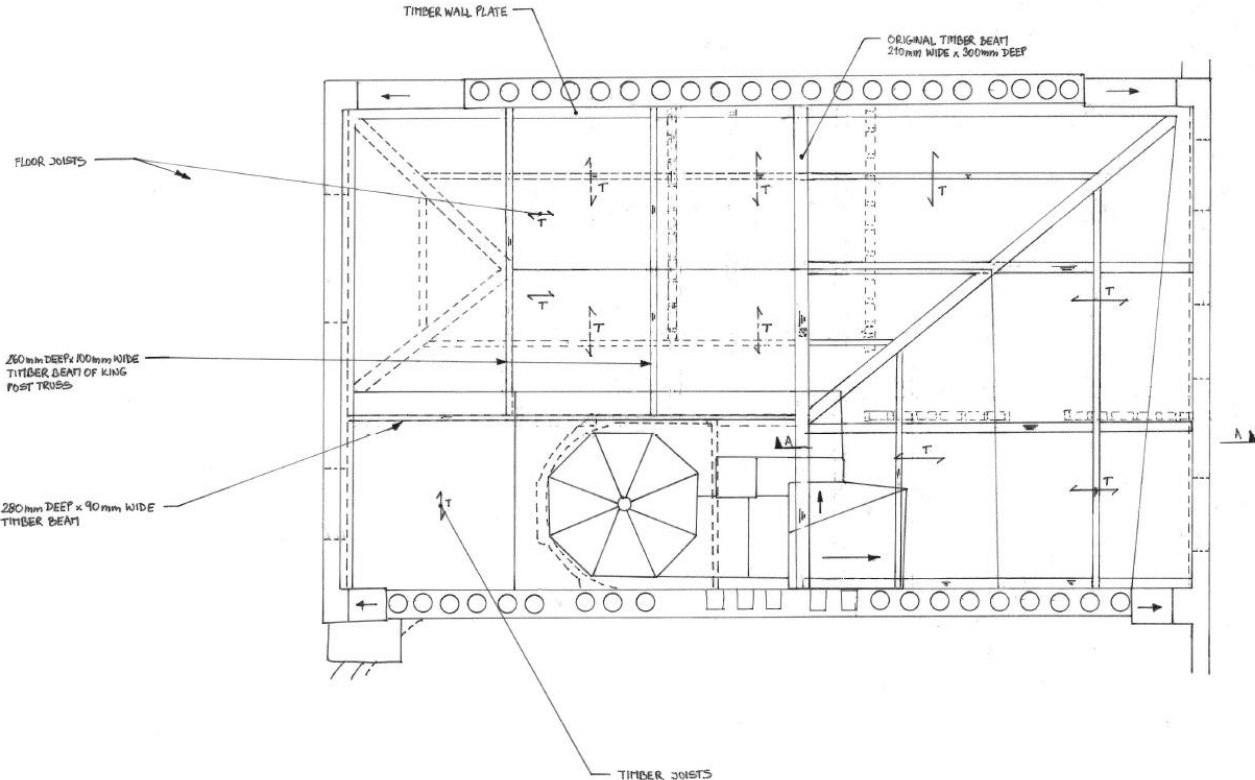


Figure 4: Roof of No. 41

4.0 Condition and Proposed Repairs

Based on the targeted local opening up works to date, the building is generally of a robust construction and is in a satisfactory condition for its age and type of construction. However there are some known defects which will be addressed, in particular to the external walls. These are discussed in section 4.1 below.

4.1 Walls

Our appraisal of the external walls has found some issues with de-lamination of the outer skin of facing brickwork. The survey shows significant bulging at the upper levels, as shown on figure 5, which may indicate that the facing brick is separating from the backing brick. These issues need to be addressed in order to reinstate the robustness of these walls.

The proposed repairs to the façade involve pinning the facing brick back to the main body of the wall where practical and where there is limited de-lamination. Where there is significant de-lamination pinning would not be effective, and local areas of re-building may be needed. Existing bricks are to be carefully removed and reused for this.

4.2 Floors

The floor structure in the front room a level 3 is notably springy and the floor levels recorded by the survey show this floor is sagging.

The floors are generally stiff where there are internal stud walls providing intermediate support to the primary beams. However, some rooms do not have stud walls to support the primary beams and these are where the floors are springy. Some targeted opening up works are to be undertaken at the start of the works to confirm details and condition of primary timber beams. We will then review and develop any necessary repairs or stiffening works to address defects encountered to improve the stiffness of these floors.

During the opening up works, some other defects were observed. These involve local splits and shakes in timbers, poor connections between timber members and some water ingress in places. Where these defects are encountered they will be repaired as part of the works.

4.3 Roof

We have noticed local areas of possible timber decay at eaves and valleys. These will be surveyed by a timber specialist and decayed members will be carefully repaired. In principle the approach will be to retain existing fabric where possible and to supplement this with low key additional structure to give a 'helping hand' where necessary.

4.4 Balconies

We have viewed the rear balcony and we have noted that some of the ends of the timber beams are decayed. A timber survey is to be undertaken to confirm the extent of decay and new sections of timber are to be spliced in to replace decayed timber.

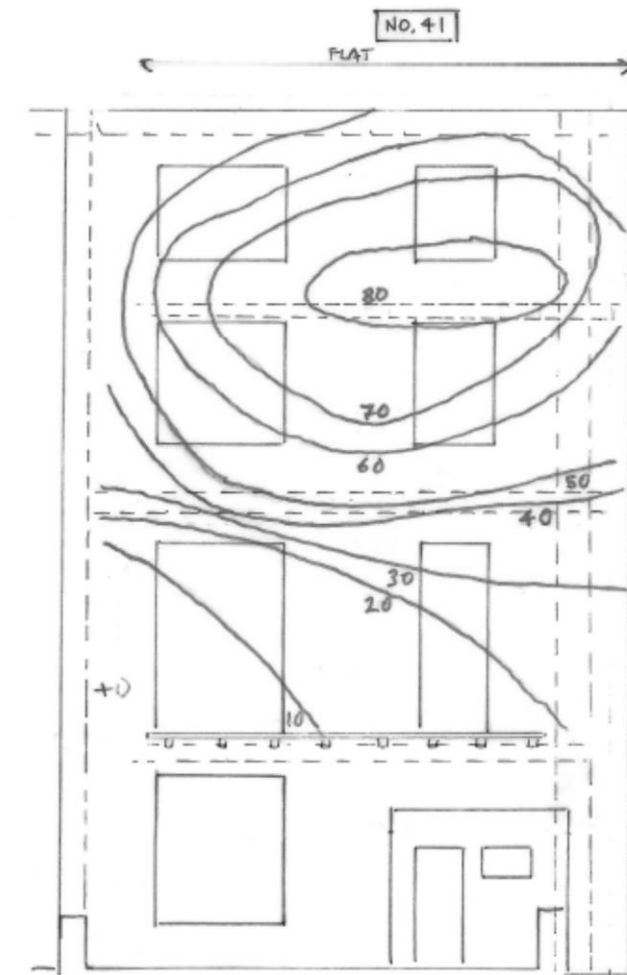


Figure 6: Rear elevation of House 41, showing wall movements

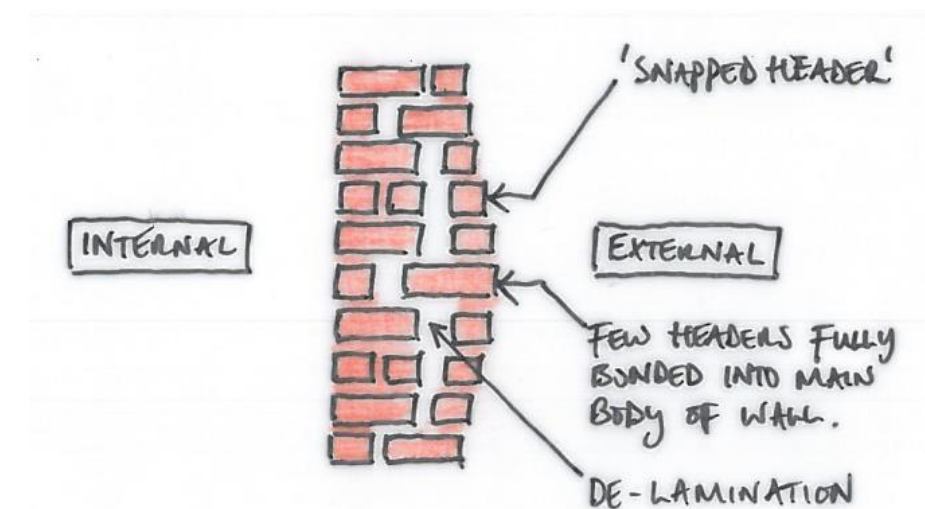


Figure 5: Sketch showing issues with de-lamination

5.0 Proposed Alterations

The proposed scheme involves upgrading the services and forming openings in some walls to create open office spaces, and in general these alterations are minor structurally. The key items are discussed below. Refer to drawings in Appendix 2 for details of proposed structural alterations.

5.1 Services Strategy

The services distribution strategy is to generally avoid altering the existing fabric by re-using existing services routes where this is practical. Elsewhere the integration of new services will aim to work with the grain of the existing structure by passing services between existing timber floor joists and with careful coordination of the routes to limit notching to existing joists. Redundant services openings will be made good. The proposed services integration is summarised in more detail on drawing 1756/705/096 in Appendix 2.

5.2 Openings in Loadbearing Walls

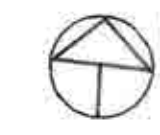
New openings will be formed in the basement masonry walls. New steel frames will be installed locally to re-support floors above. The steel frames will be supported on reinforced concrete ground beams, which will maintain existing load paths by distributing the loads from the steel frame evenly into the ground at foundation level.

Some openings will be formed in loadbearing stud walls at level 2. New steel framing will be installed here to provide support to the timber floors above.

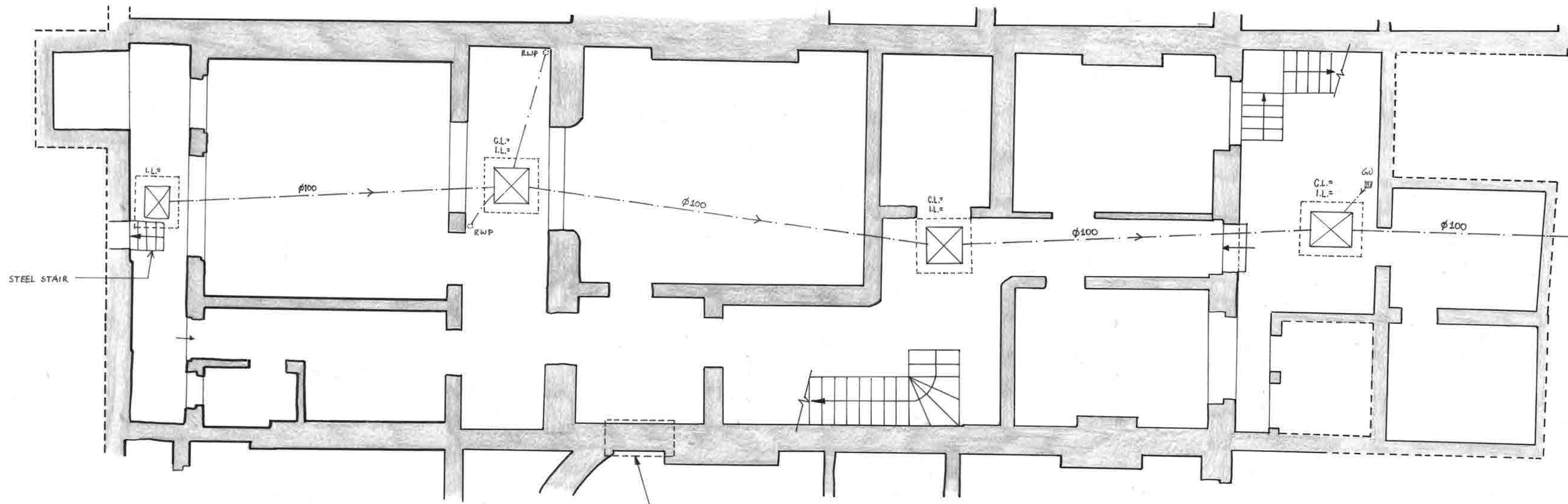
6.0 Below Ground Drainage

The existing below ground drainage is a combined foul and surface system in the basement. The manholes are arranged along the length of the building and fall toward the street. The system currently discharges under gravity to the mains sewer on Russell Square. The strategy for the discharge of the drainage will be reviewed at the next design stage. As part of the proposed scheme the bathroom layouts will be altered and the existing connections into the below ground drainage will be re-used.

Appendix 1 – Existing Structure Drawings



notes
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATIONS.



WALL HAS BEEN REPAIRED
HERE PREVIOUSLY.

A	14.05.18	NOTES ADDED.	
-	29.5.18	ISSUED FOR INFORMATION.	LK

BRITISH MUSEUM
41 RUSSELL SQUARE
WC1

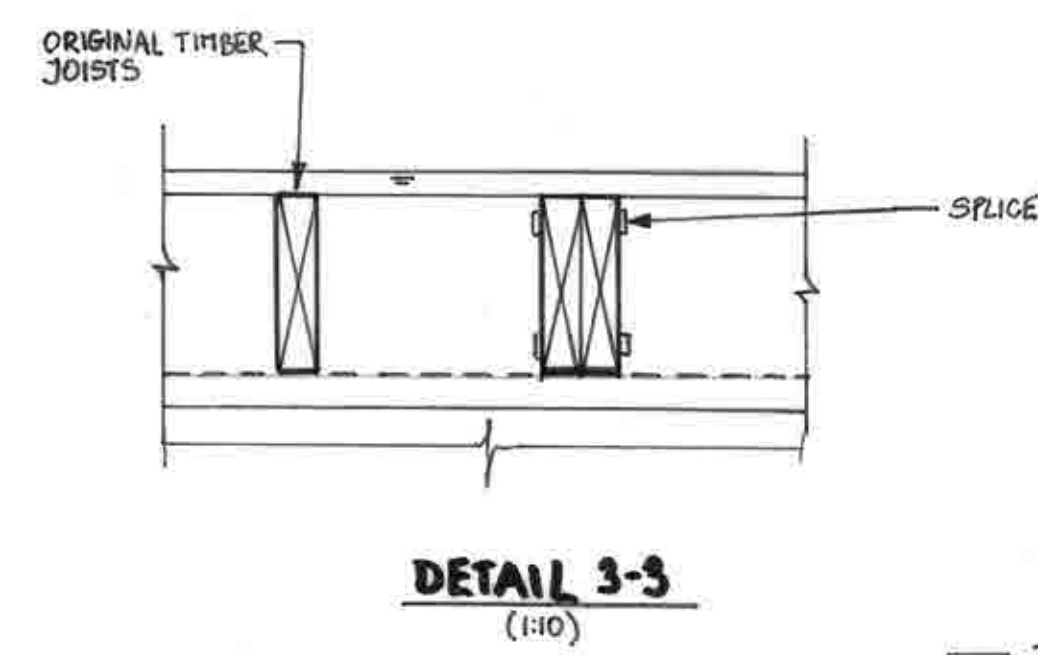
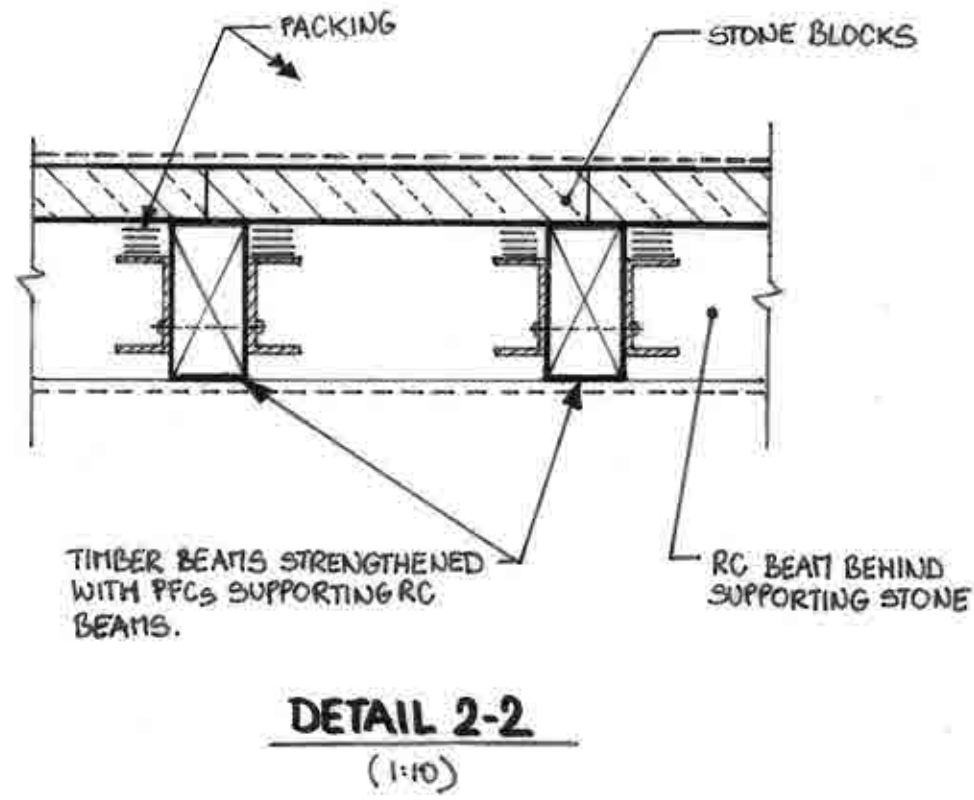
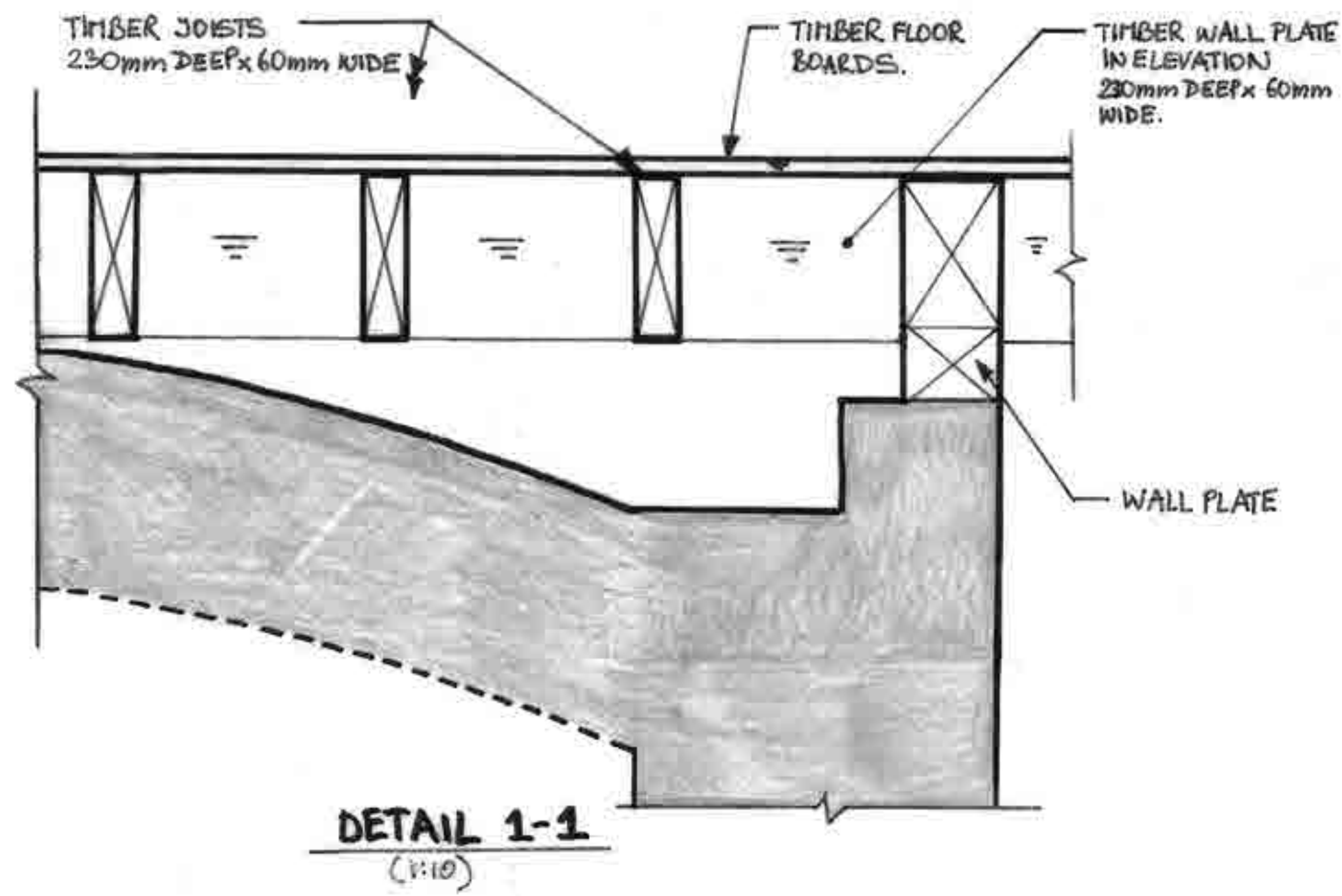
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BASEMENT PLAN

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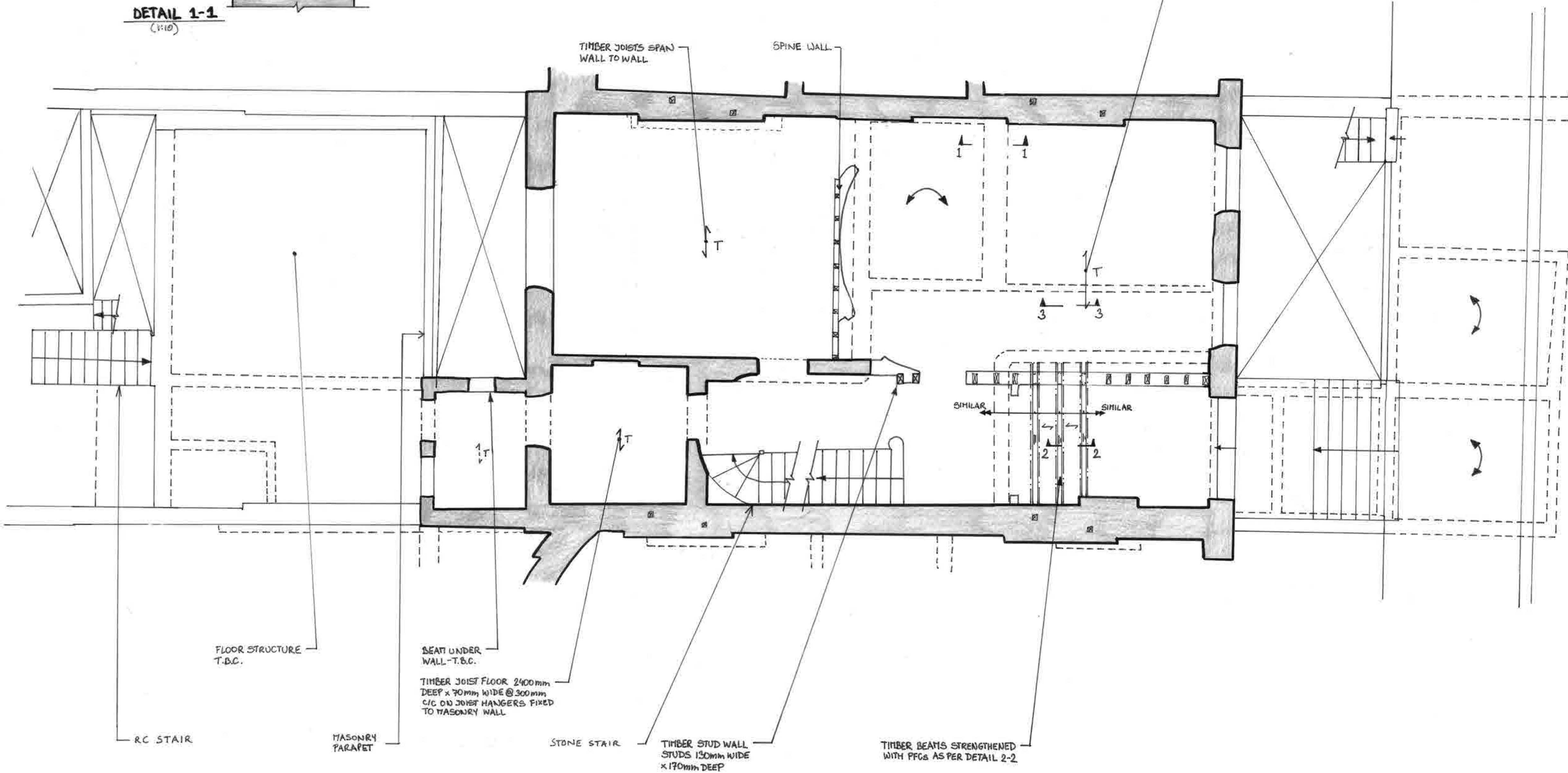
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TIMBER JOIST FLOOR
230mm DEEP x 60mm WIDE
@ 375mm o/c
RESTING ON MASONRY
WALL.



NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATIONS.

A	14.5.18	DETAIL 3-3 ADDED. NOTES ADDED.	
-	27.9.18	ISSUED FOR INFORMATION.	LK

job
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WC1**

title
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GROUND FLOOR PLAN**

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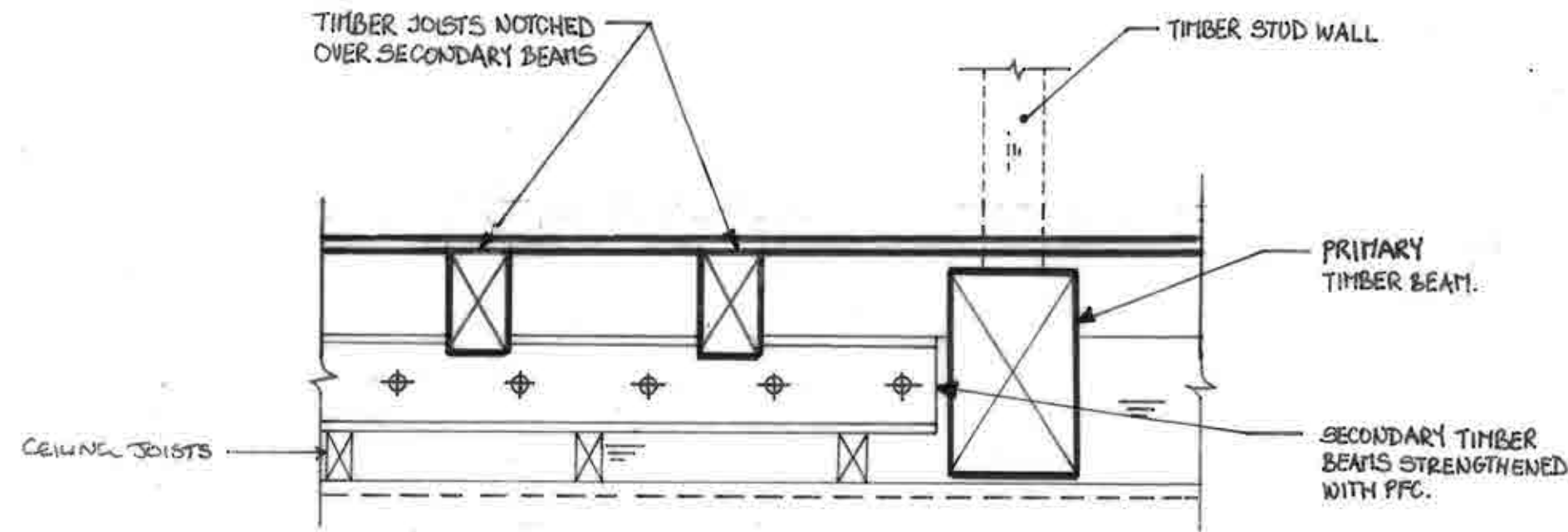
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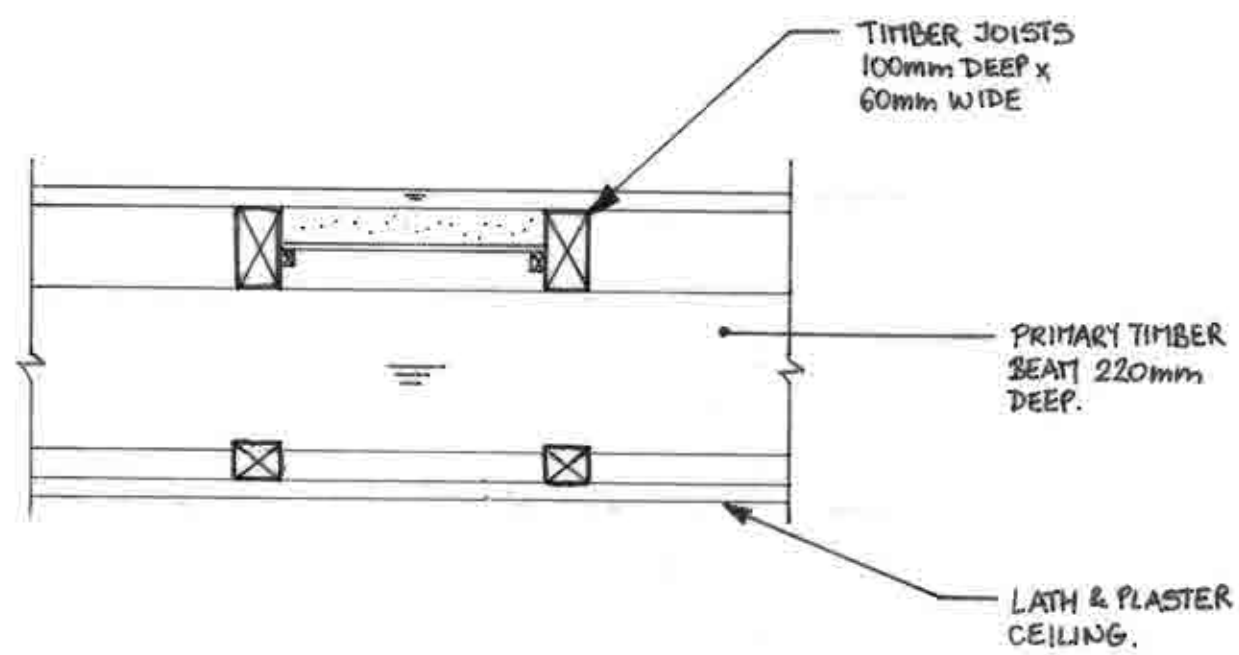
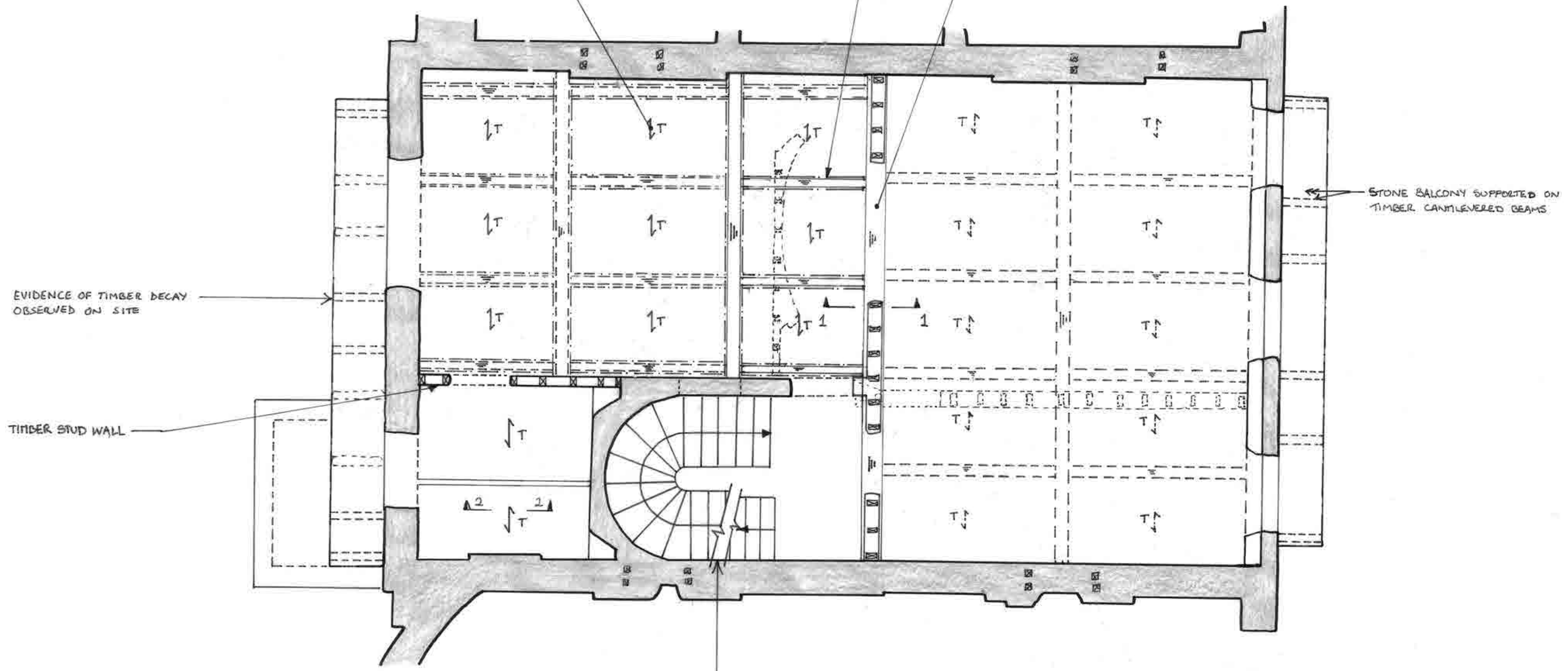


DETAIL 1-1
(1:10)

TIMBER JOISTS APPROX. 160mm DEEP.

APPROX. 230mm DEEP SECONDARY TIMBER BEAM STRENGTHENED WITH PFCs APPROX. 150mm DEEP

320mm DEEP PRIMARY TIMBER BEAM BELOW STUD WALL.



DETAIL 2-2
(1:10)

A	14.05.18	DETAIL 2-2 ADDED. NOTES ADDED.	
-	27.3.18	ISSUED FOR INFORMATION	LK

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WC1

EXISTING STRUCTURE
FIRST FLOOR PLAN

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RG	LK
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Alan Baxter

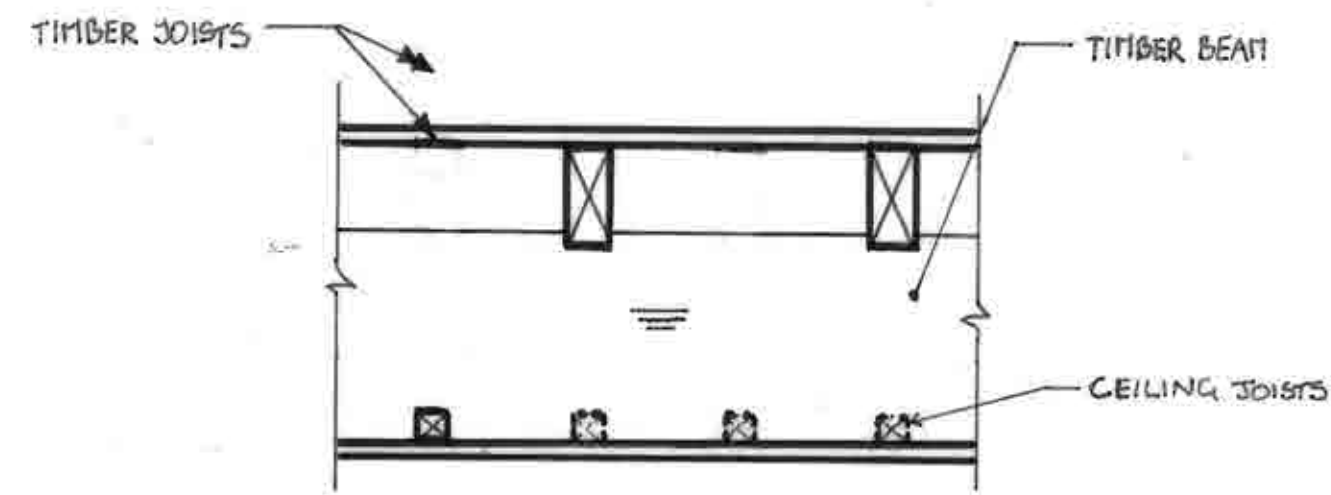
75 Cowcross Street London EC1M 6EL
tel 020 7250 1555
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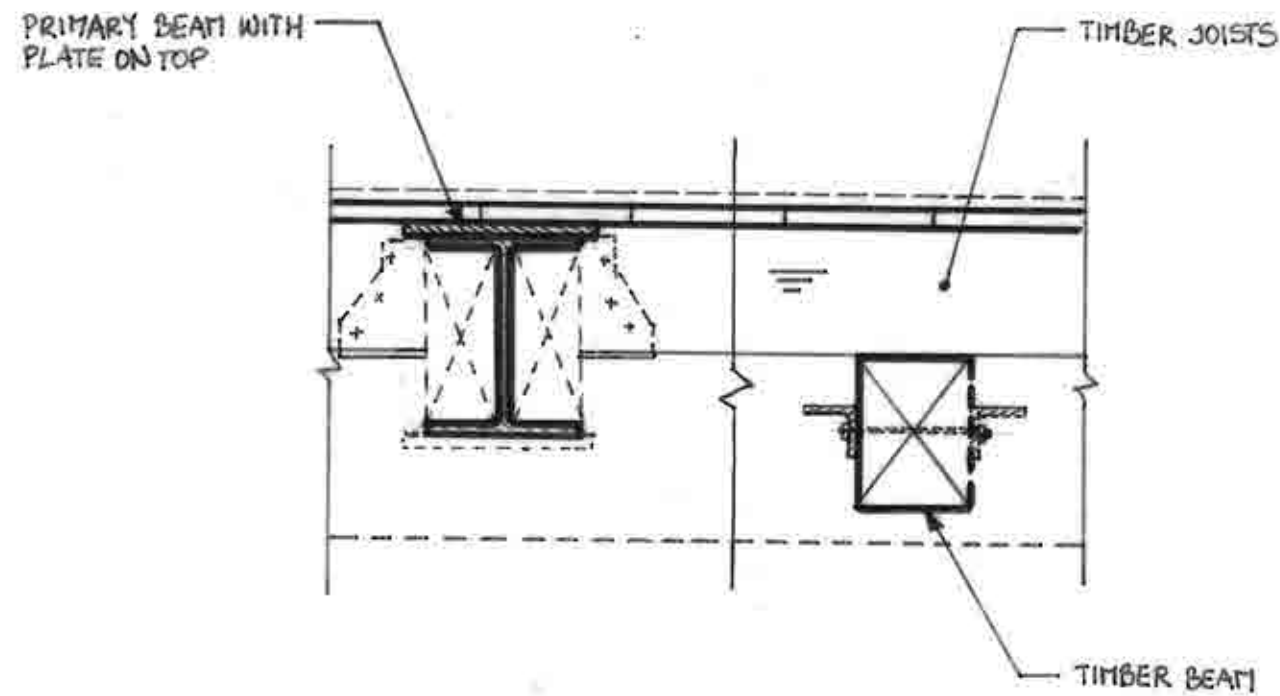
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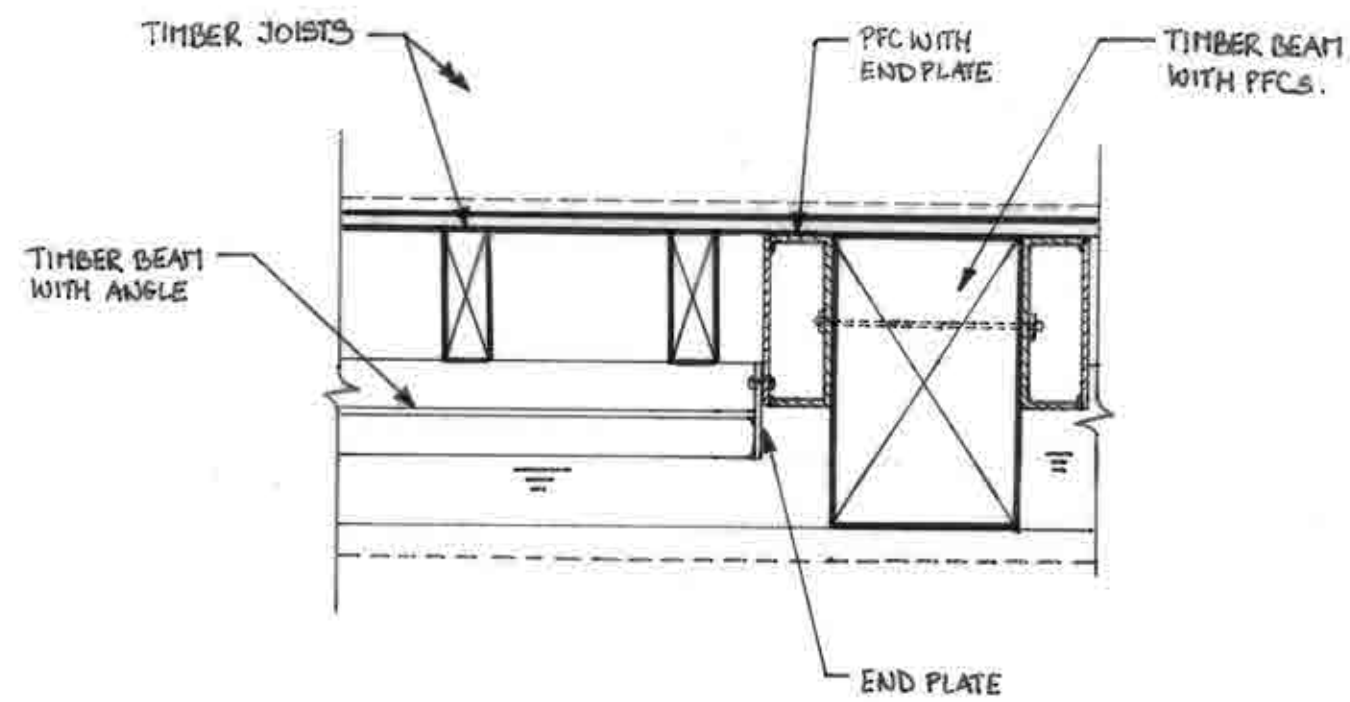
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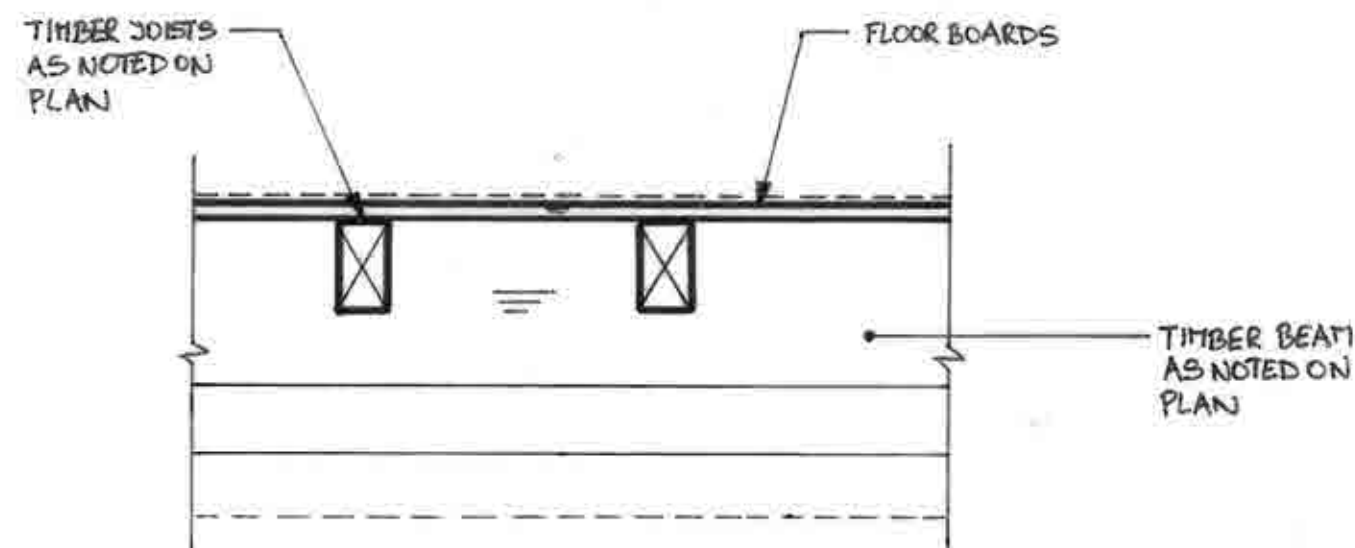
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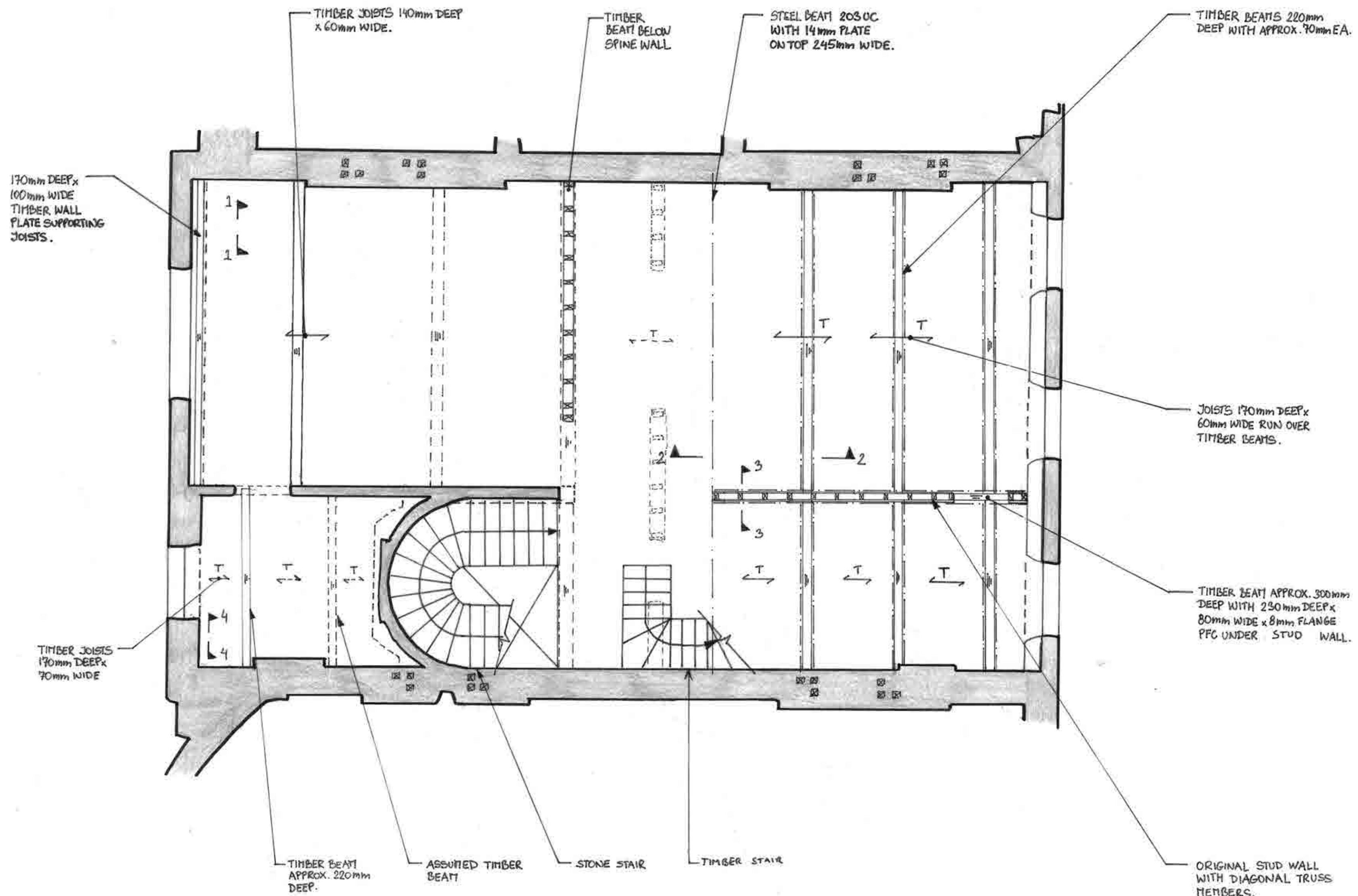
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DETAIL 3-3
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DETAIL 4-4
(1:10)



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-	27.3.18	ISSUED FOR INFORMATION.	LK

job
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WC1**

180
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SECOND FLOOR PLAN

drawn	checked
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Alan Baxter

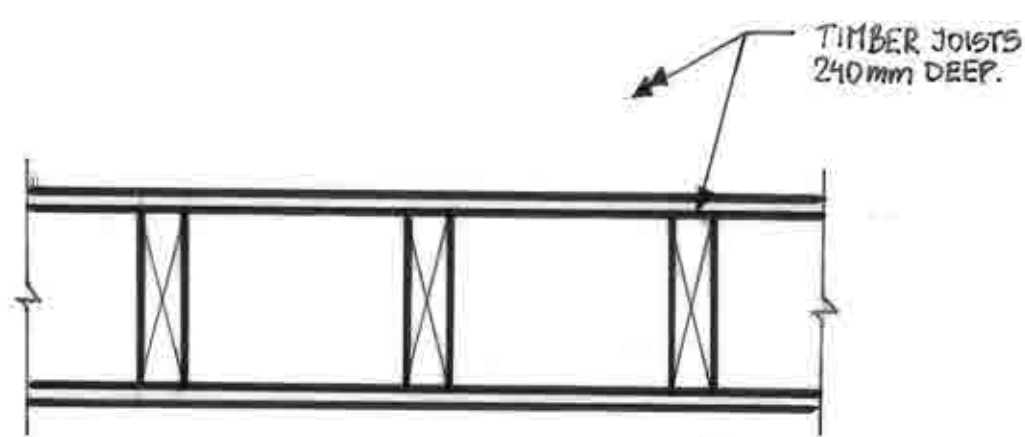
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tel 020 7250 1555
email aba@alanbaxter.co.uk

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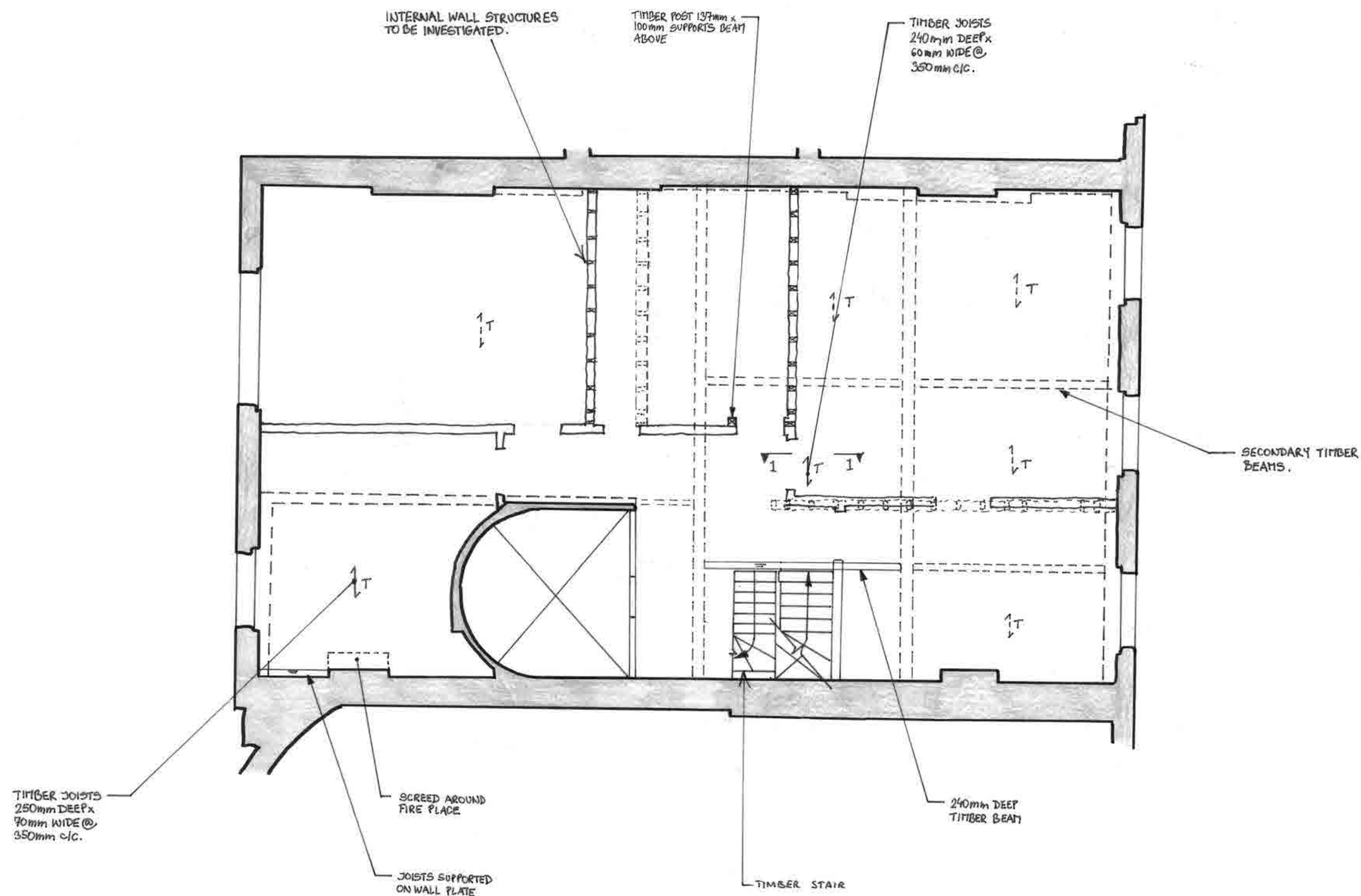
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notes
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A	14.05.18	NOTE ADDED.	
-	29.03.18	ISSUED FOR INFORMATION	LK

job
**BRITISH MUSEUM
41 RUSSELL SQUARE
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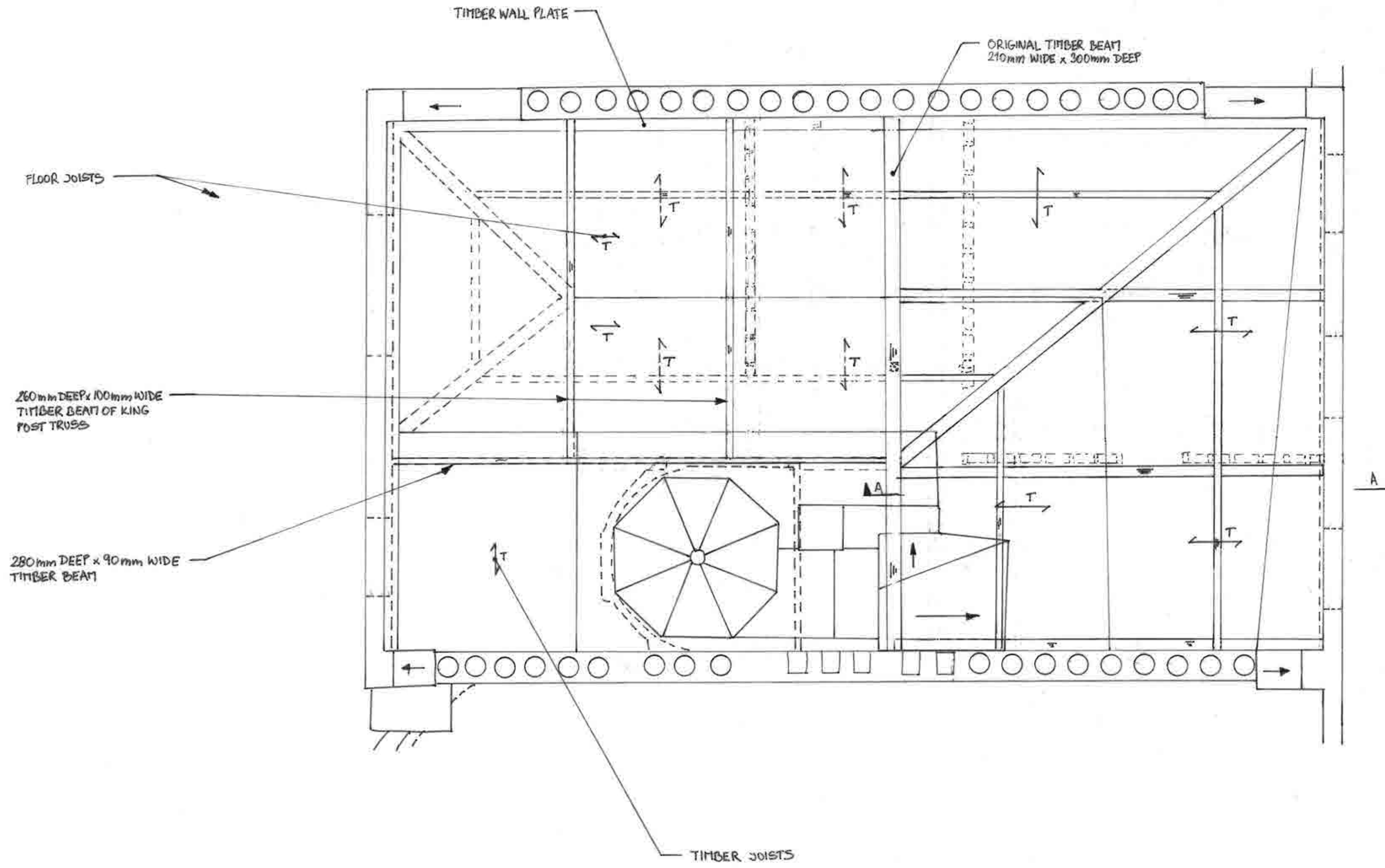
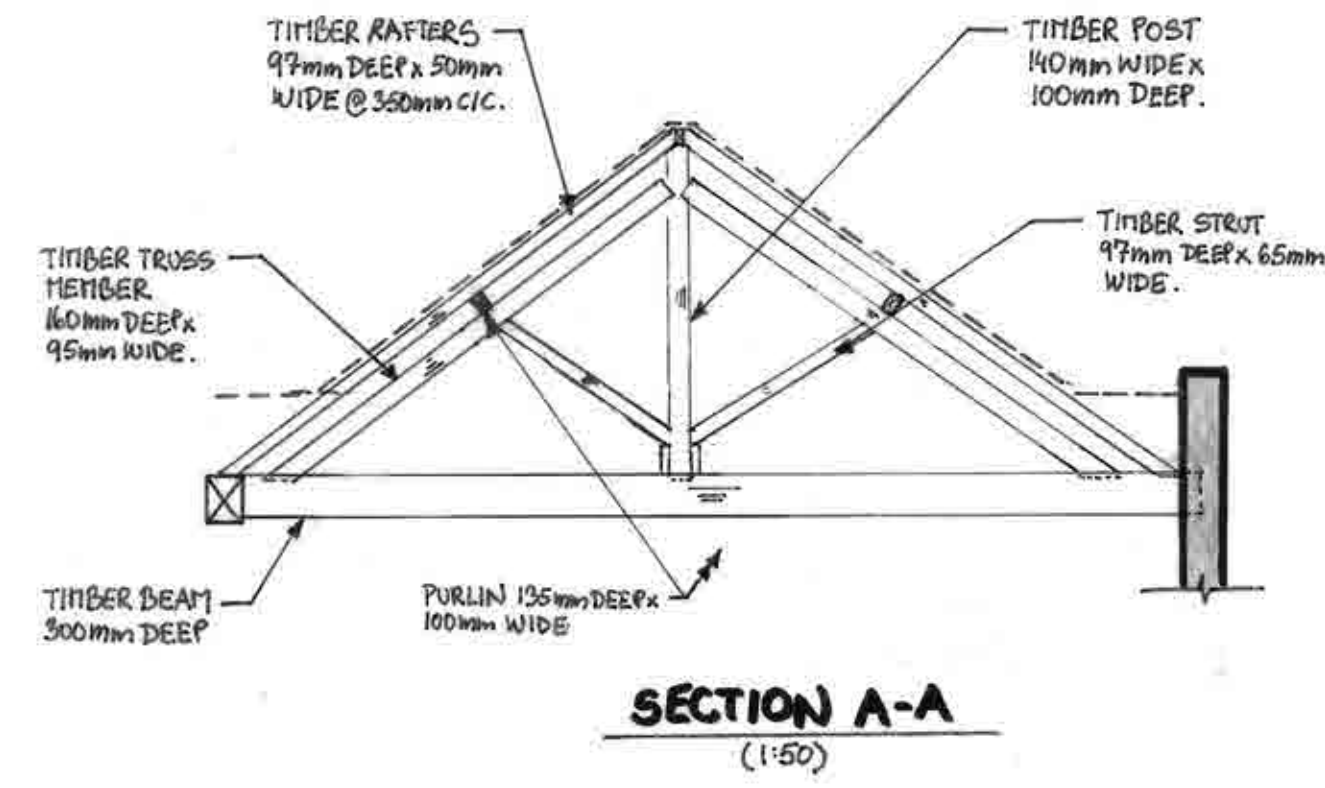
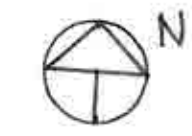
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1756/703/005	A



NOTES
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-	28.3.18	ISSUED FOR INFORMATION.	LK

job
**BRITISH MUSEUM
41 RUSSELL SQUARE
WC1**

title
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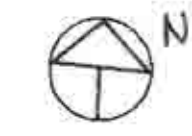
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Alan Baxter

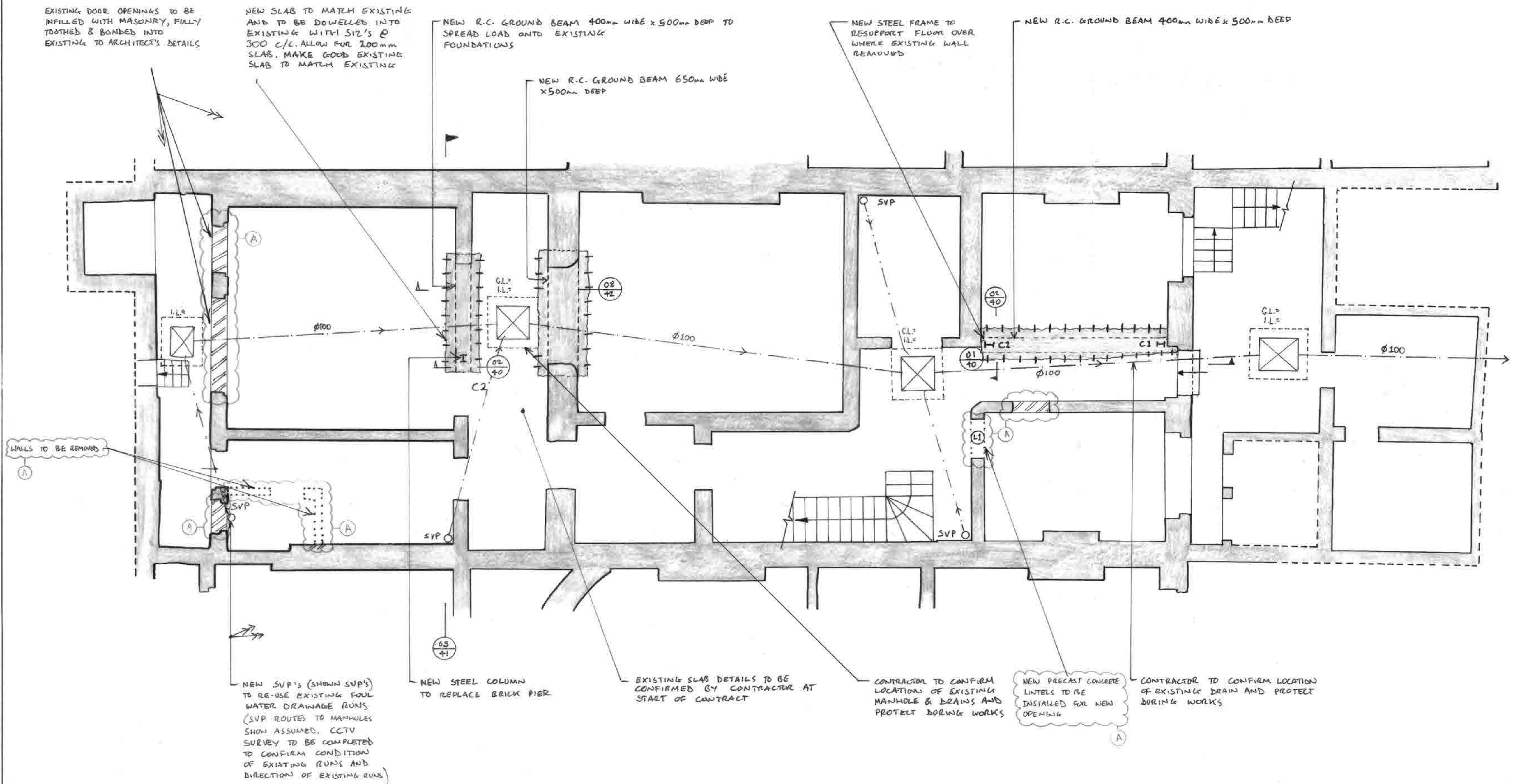
75 Cowcross Street London EC1M 6EL
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dep. no. 1756/703/006	rev. A
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Appendix 2 – Proposed Structure Drawings



1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATIONS.



LINTEL SCHEDULE		
REF	D	W mm
L1	140mm	100mm
L2	215mm	100mm

COLUMN SCHEDULE		
REF	SIZE	
C1	127 x 76	x 25 UB
C2	152 x 152	x 23 UC

BEAM SCHEDULE		
REF	SIZE	
B1	254 x 102	x 25 UB
B2	152 x 152	x 23 UC
B3	203 x 102	x 23 UB

A	23.01.18	DRAWING & NOTES AMENDED TO SOFT ARCHITECT'S	AL
-	7.6.19	ISSUED FOR INFORMATION	LK

BRITISH MUSEUM
41 RUSSEL SQUARE
WC1

PROPOSED STRUCTURE
BASEMENT PLAN

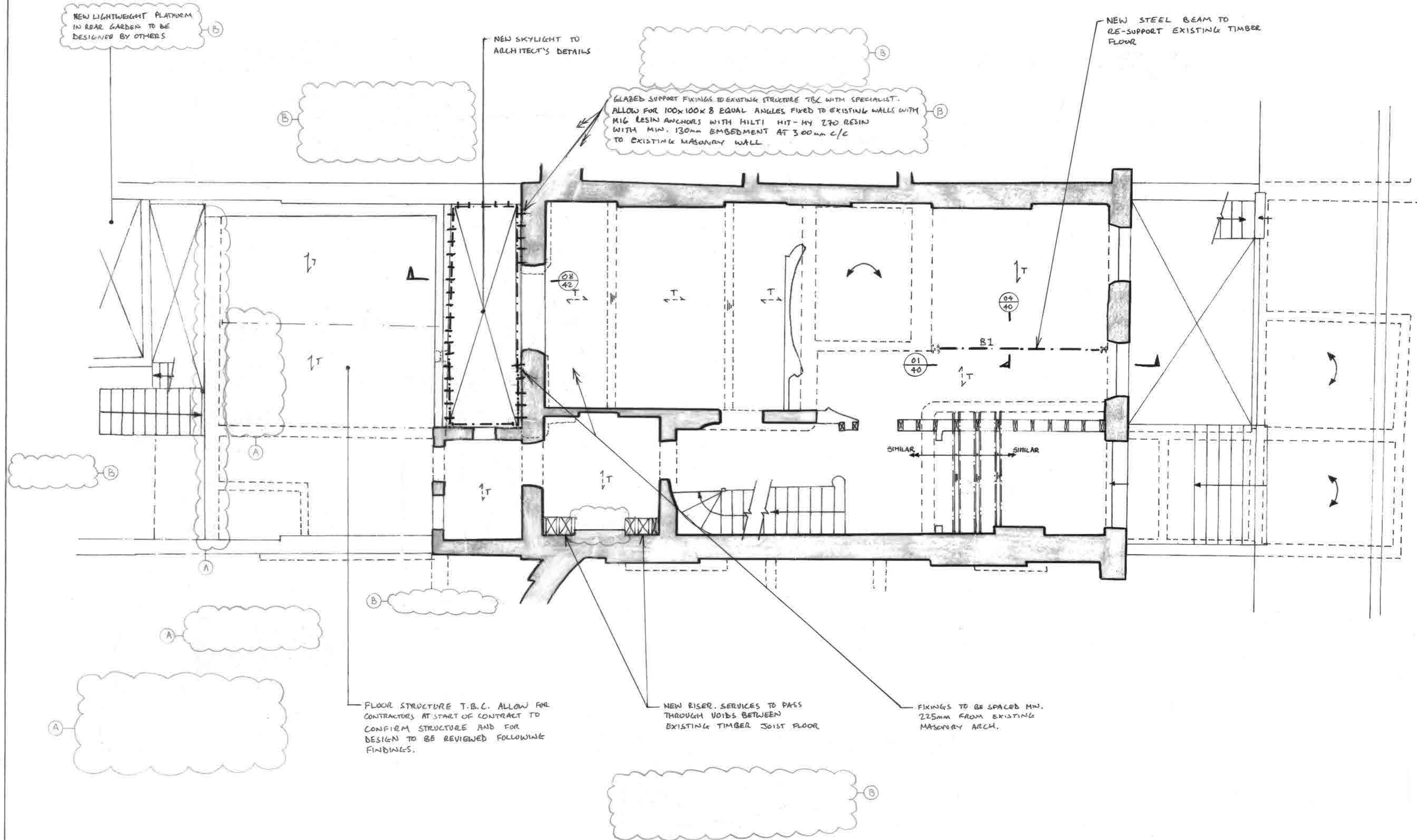
AL
 APR '18
 LK
 scale (original - A1)
 1:50

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Fig. No. **1756/705/020** Rev. **A**



NOTES
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATIONS.



NEW LIGHTWEIGHT PLATFORM IN REAR GARDEN TO BE DESIGNED BY OTHERS

NEW SKYLIGHT TO ARCHITECT'S DETAILS

NEW STEEL BEAM TO RE-SUPPORT EXISTING TIMBER FLOOR

GLAZED SUPPORT FIXINGS TO EXISTING STRUCTURE T.B.C. WITH SPECIALIST. ALLOW FOR 100x100x8 EQUAL ANGLES FIXED TO EXISTING WALLS WITH M16 RESIN ANCHORS WITH HILTI HIT-HY 270 RESIN WITH MIN. 130mm EMBEDMENT AT 300mm C/C TO EXISTING MASONRY WALL

FLOOR STRUCTURE T.B.C. ALLOW FOR CONTRACTORS AT START OF CONTRACT TO CONFIRM STRUCTURE AND FOR DESIGN TO BE REVIEWED FOLLOWING FINDINGS.

NEW RISER SERVICES TO PASS THROUGH VOIDS BETWEEN EXISTING TIMBER JOIST FLOOR

FIXINGS TO BE SPACED MIN. 225mm FROM EXISTING MASONRY ARCH.

B	22.07.18	DRAWING & NOTES AMENDED TO 2017 ARCHITECT'S	AL
A	16.07.18	GARDEN WALL OMITTED NOTES AMENDED PLANT RELOCATED	AL
-	6.7.18	ISSUED FOR INFORMATION	LX

**BRITISH MUSEUM
41 RUSSEL SQUARE
WC1**

**PROPOSED STRUCTURE
GROUND FLOOR PLAN**

client: AL
date: APR '18
drawing: LX
scale: (original / A1)
1:50

Alan Baxter

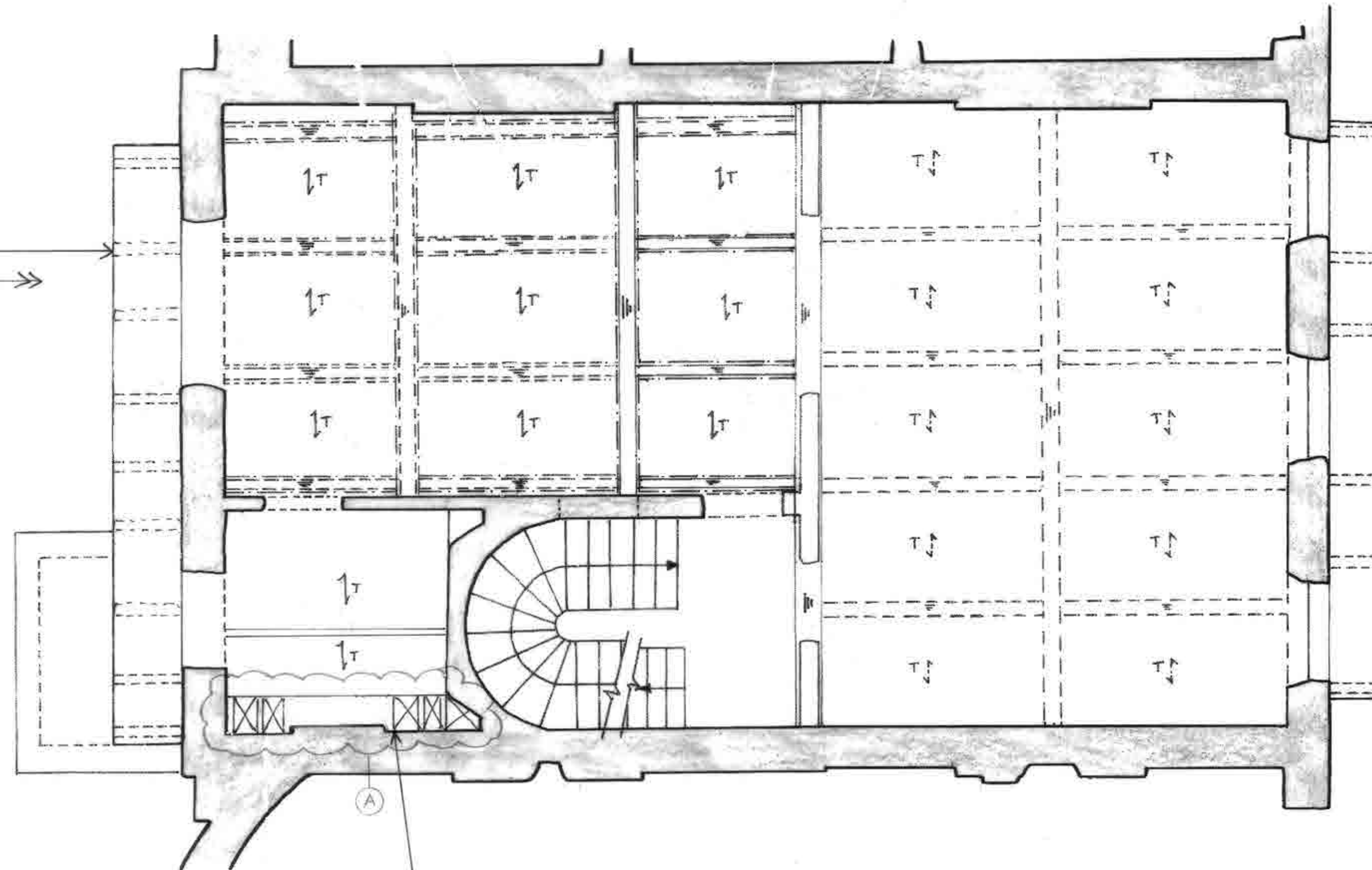
75 Cowcross Street, London, EC1M 6EL
tel: 020 7250 1555
email: aob@alanbaxter.co.uk
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1756/705/021	B
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1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATIONS.

TIMBER BALCONY BEAMS TO BE REPAIRED. DETAILS TBC FOLLOWING A TIMBER SURVEY



NEW RISER SERVICES TO PASS THROUGH VOIDS BETWEEN EXISTING TIMBER JOIST FLOOR

A	16.07.18	RISER EXTENT AMENDED	AL
-	2.6.18	ISSUED FOR INFORMATION	LK

BRITISH MUSEUM
41 RUSSEL SQUARE
WC1

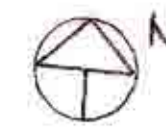
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FIRST FLOOR PLAN

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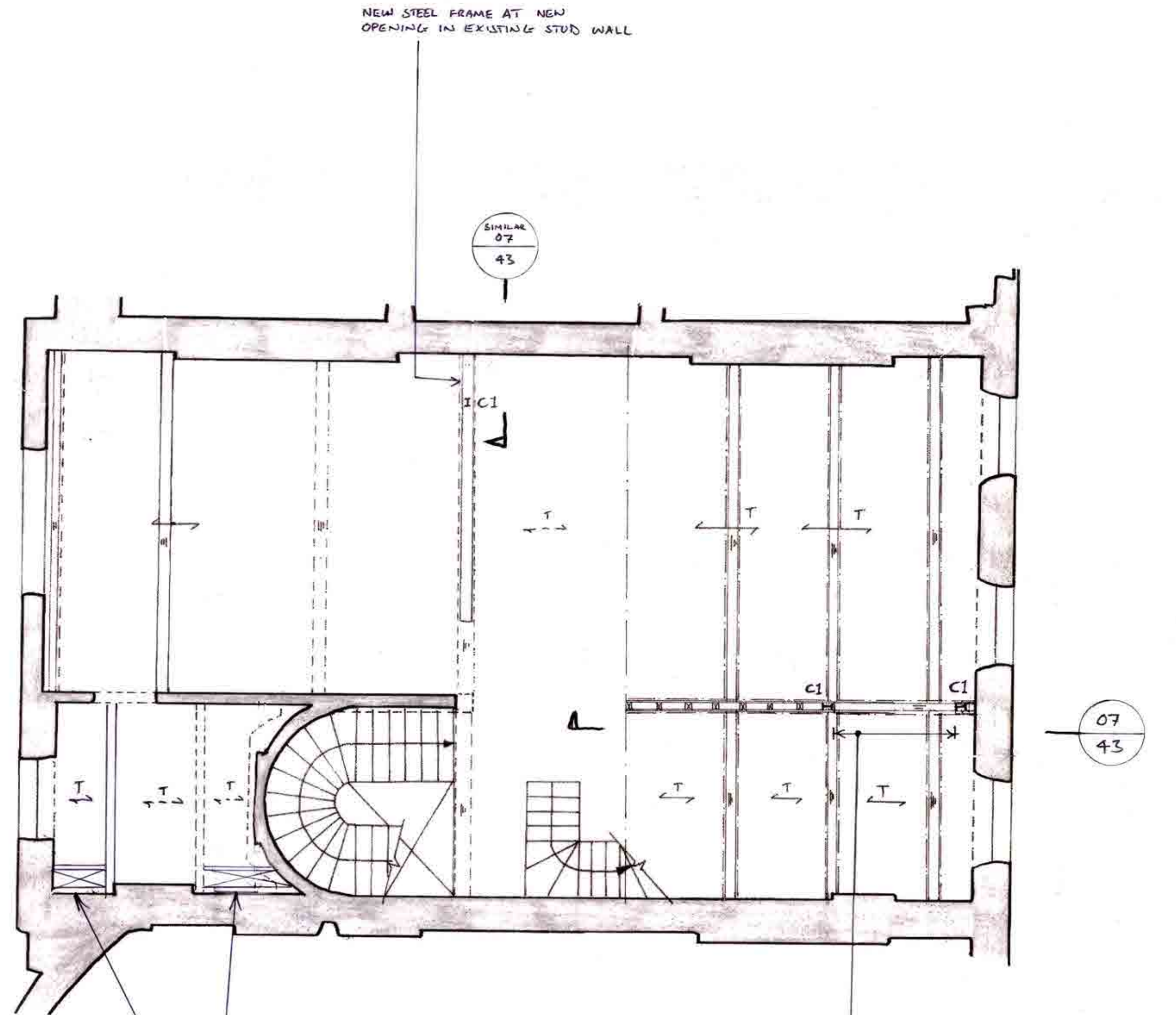
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NOTE: THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATION.



NEW STEEL FRAME AT NEW
OPENING IN EXISTING STUD WALL

SIMILAR
07
43

07
43

NEW RISER SERVICES TO PASS
THROUGH VOIDS BETWEEN
EXISTING TIMBER JOIST FLOOR

OPENING TO BE FORMED IN
EXISTING STUD WALL. FOR FURTHER
DETAILS REFER TO DRAWING
1756/705/43

7.6.18 ISSUED FOR INFORMATION LK

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WC1

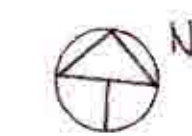
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SECOND FLOOR PLAN

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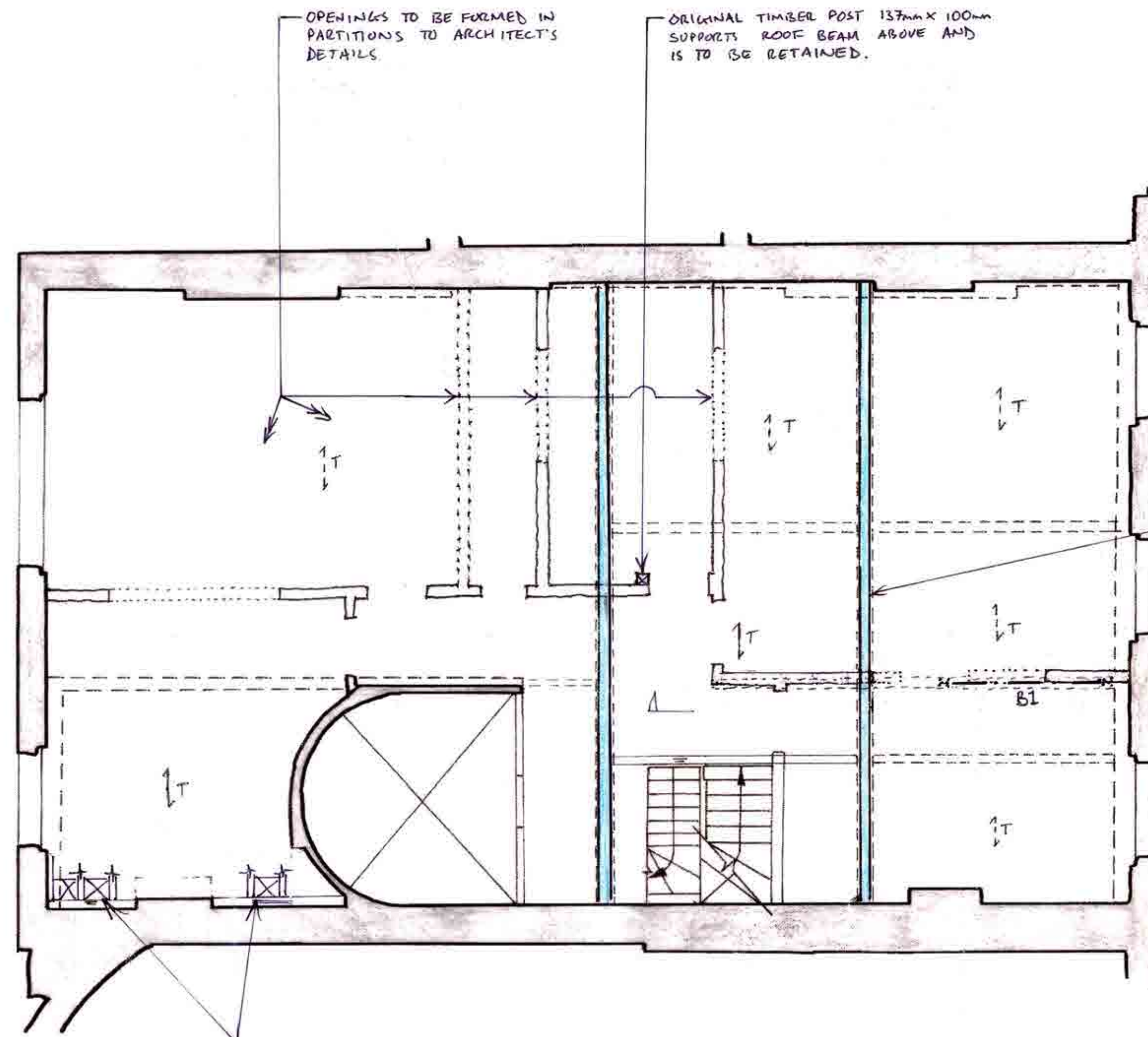
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1756/705/023



1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATIONS.



OPENINGS TO BE FORMED IN PARTITIONS TO ARCHITECT'S DETAILS.

ORIGINAL TIMBER POST 137mm x 100mm SUPPORTS ROOF BEAM ABOVE AND IS TO BE RETAINED.

ALLOW FOR STRENGTHENING EXISTING BEAM WITH STEEL PLATE AS PER DRAWING 1756/705/097. STRENGTHENING T.B.C. FOLLOWING CONFIRMATIONS OF EXISTING FLOOR ARRANGEMENT. CONTRACTOR TO CONFIRM AT START OF CONTRACT & ALLOW FOR 10 WORKING DAYS FOR DESIGN TEAM TO CONFIRM FINAL DETAILS.

07/45

NEW RISER SERVICES TO PASS THROUGH VOIDS BETWEEN EXISTING TIMBER JOIST FLOOR

- 16.7.18 ISSUED FOR INFORMATION LK

**BRITISH MUSEUM
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WC1**

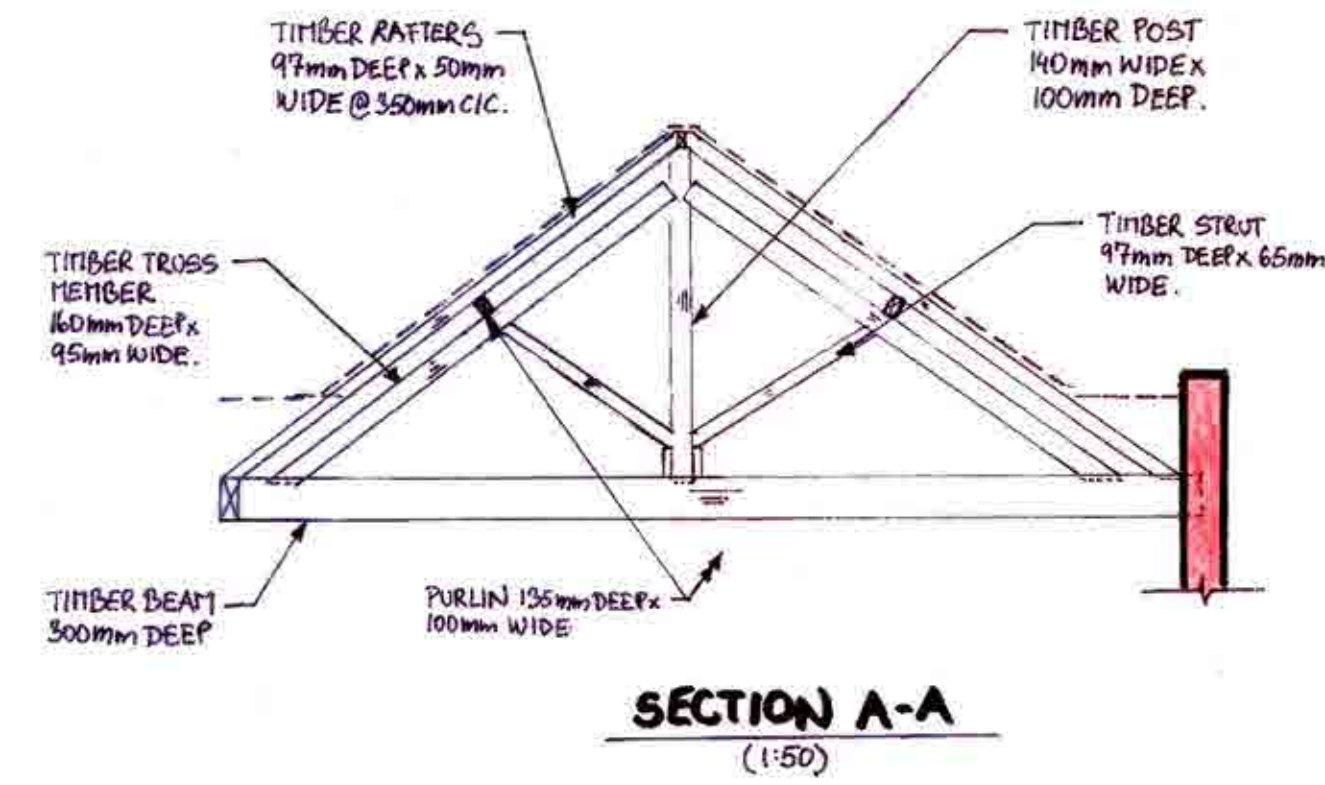
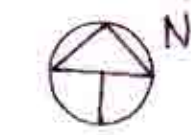
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THIRD FLOOR PLAN**

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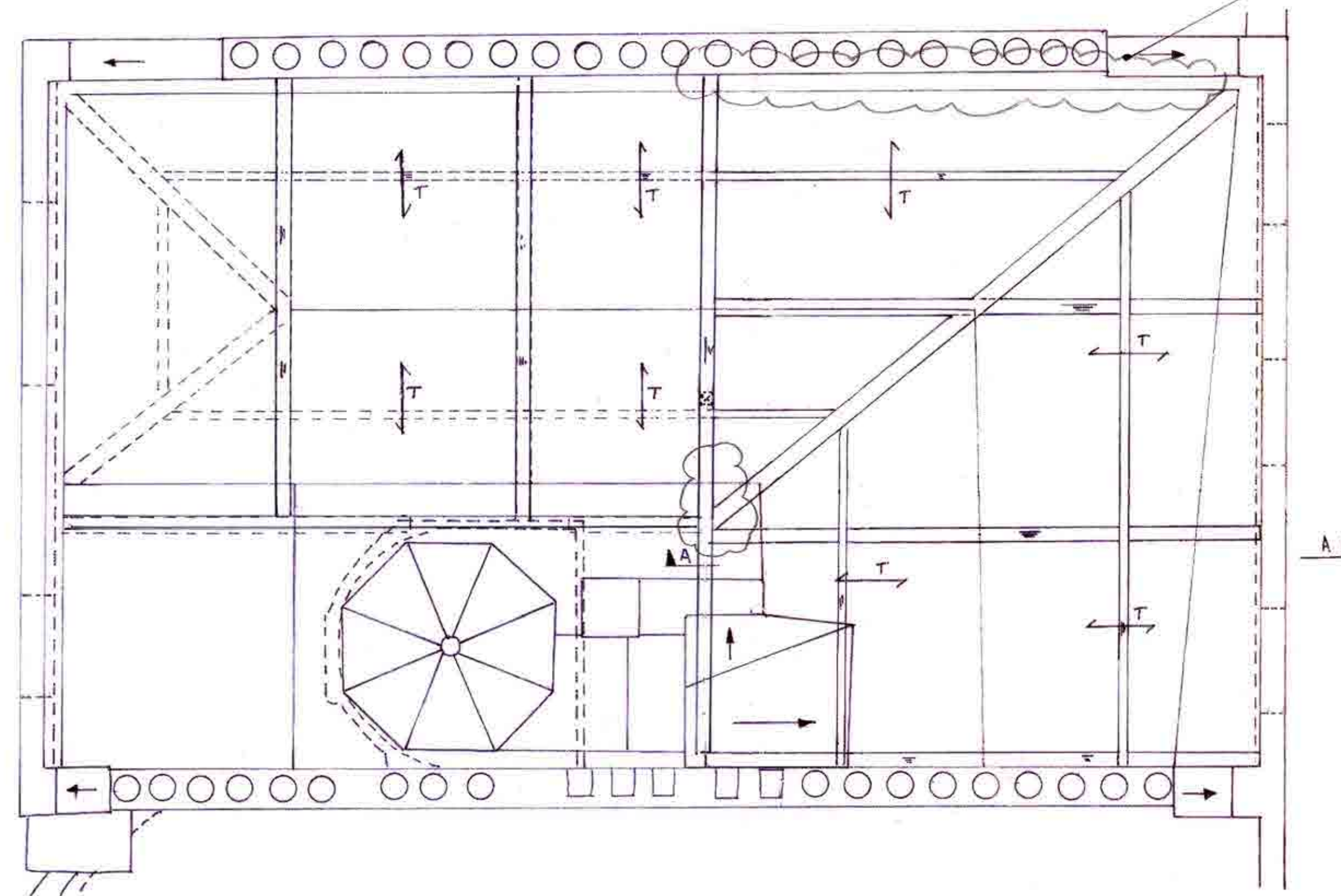
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email: alba@alanbaxter.co.uk
www.alanbaxter.co.uk

1756/705/024



TIMBER BEAMS TO BE REPAIRED.
DETAILS TBC. FOLLOWING
TIMBER SURVEY



notes
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATION.

- 6.7.18 ISSUED FOR INFORMATION LK

for
BRITISH MUSEUM
41 RUSSEL SQUARE
WC1

PROPOSED STRUCTURE
ROOF PLAN

drawn AL checked LK
date APR '18 scale (original - A1) 1:50

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fig. no. **1756/705/025** rev.

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATION.

NEW R.C. BEAM AS NOTED ON PLAN

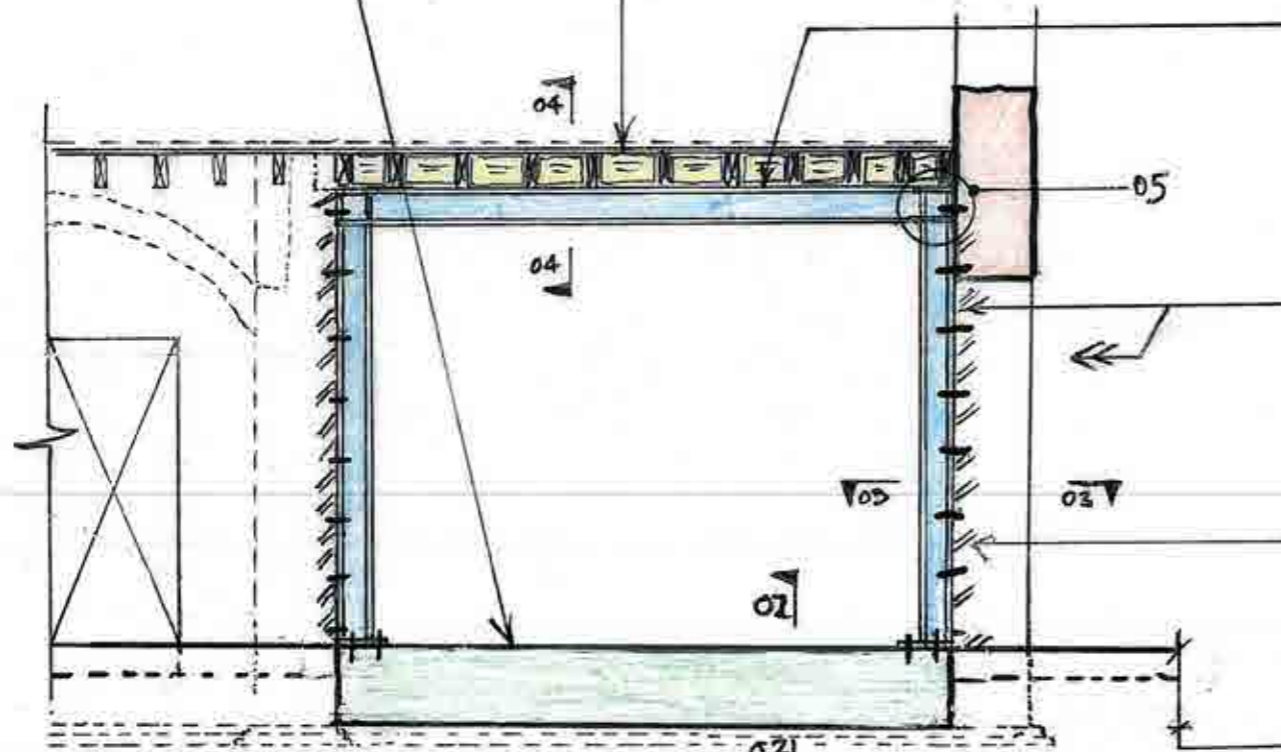
NEW FULL HEIGHT BLOCKING SIZED TO MATCH EXISTING JOISTS TO BE INSTALLED ABOVE NEW STEEL FRAME. JOISTS TO BE FIXED TO STEEL BEAM WITH PAIRS OF 90x90x90 EXPAMET BRACKETS AND FIXED TO STEEL BEAM WITH 4 NO. $\phi 4$ mm SELF-TAPPING SCREWS

NEW STEEL BEAM AS NOTED ON PLAN TO RE-SUPPORT EXISTING TIMBER FLOOR JOISTS. ALLOW FOR HARDWOOD PACKING BETWEEN TIMBER JOISTS AND STEEL BEAM. ALLOW FOR JOISTS TO BE PROPPED DURING WORKS.

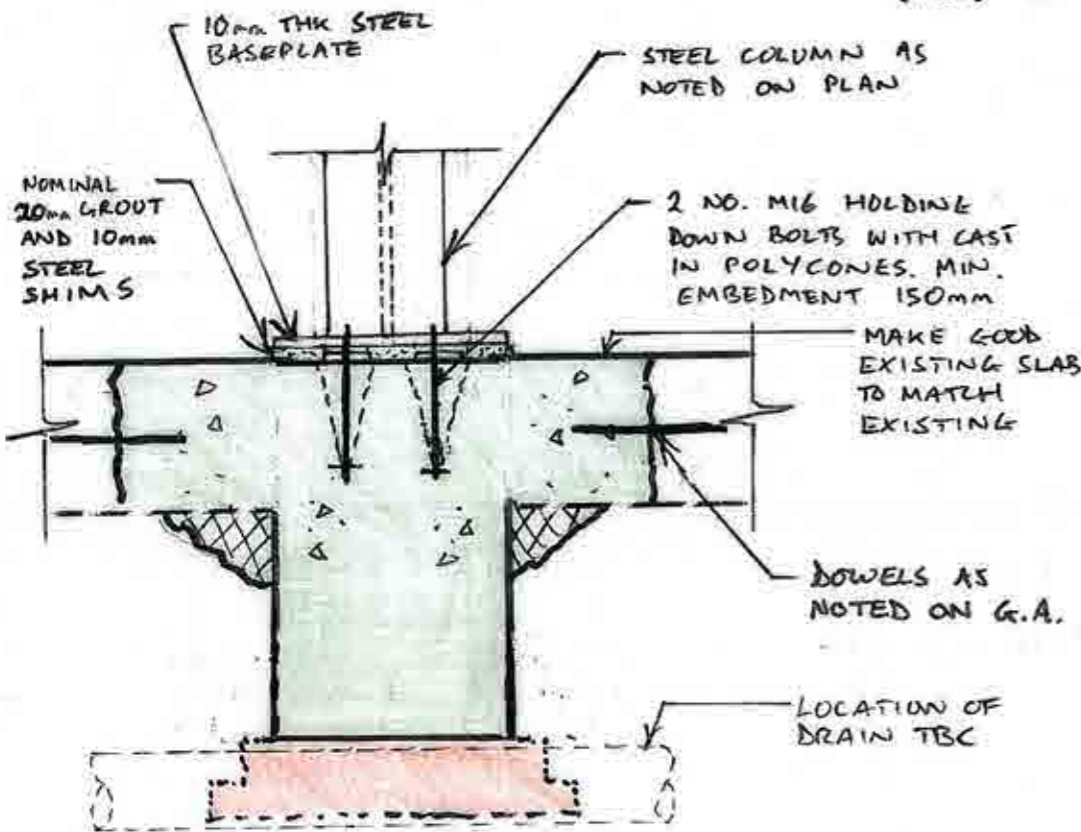
NEW STEEL COLUMNS AS NOTED ON PLAN TIED TO THE EXISTING MASONRY WALL WITH M12 RESIN ANCHORS @ 400mm C/C. MIN. 130mm EMBEDMENT

MAKE GOOD EXISTING BRICKWORK TO OTHER & BONDED TO ARCHITECT'S DETAILS

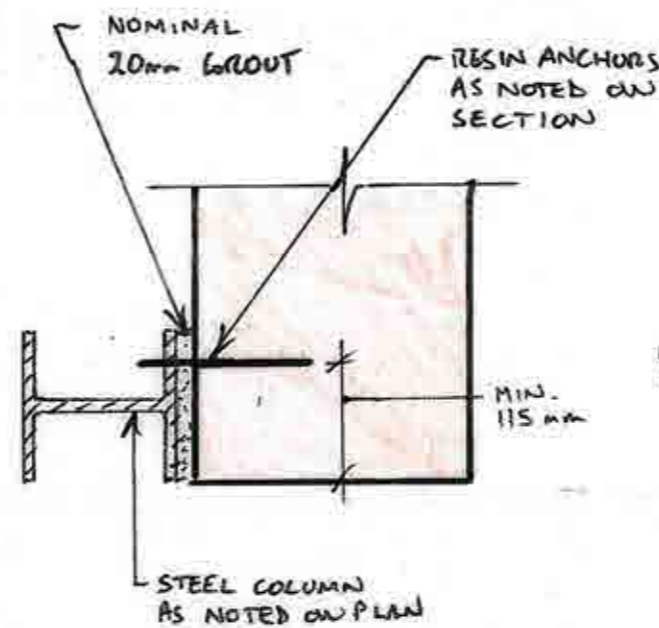
DEPTH OF EXISTING CORBELLED FOOTINGS TO BE CONFIRMED BY CONTRACTOR AT START OF CONTRACT



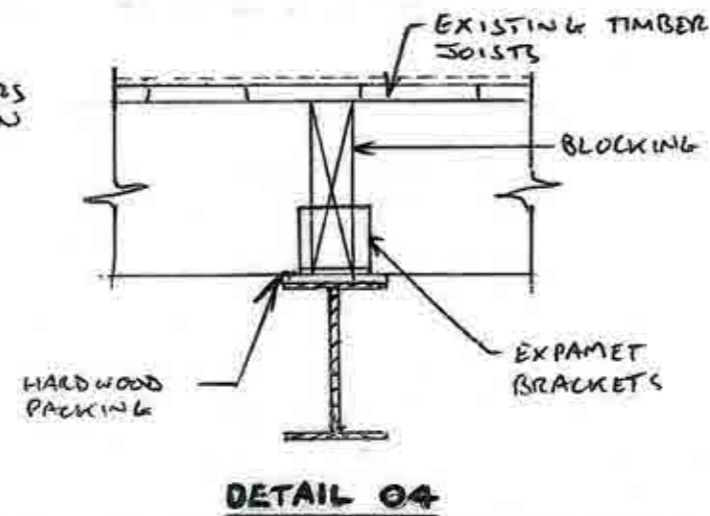
SECTION 01
(1:50)



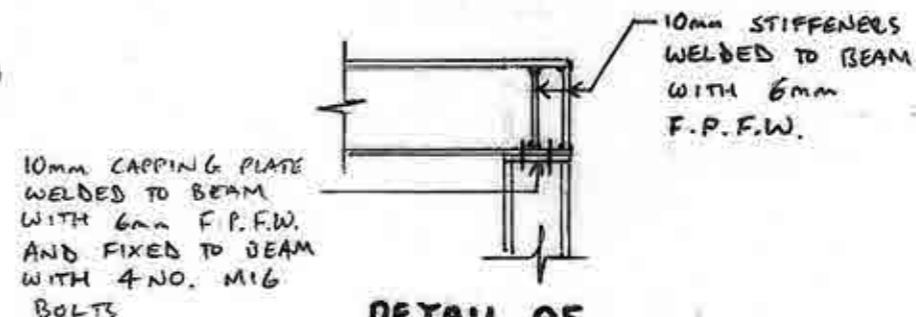
DETAIL 02
(1:10)



DETAIL 03
(1:10)



DETAIL 04



DETAIL 05
(1:20)

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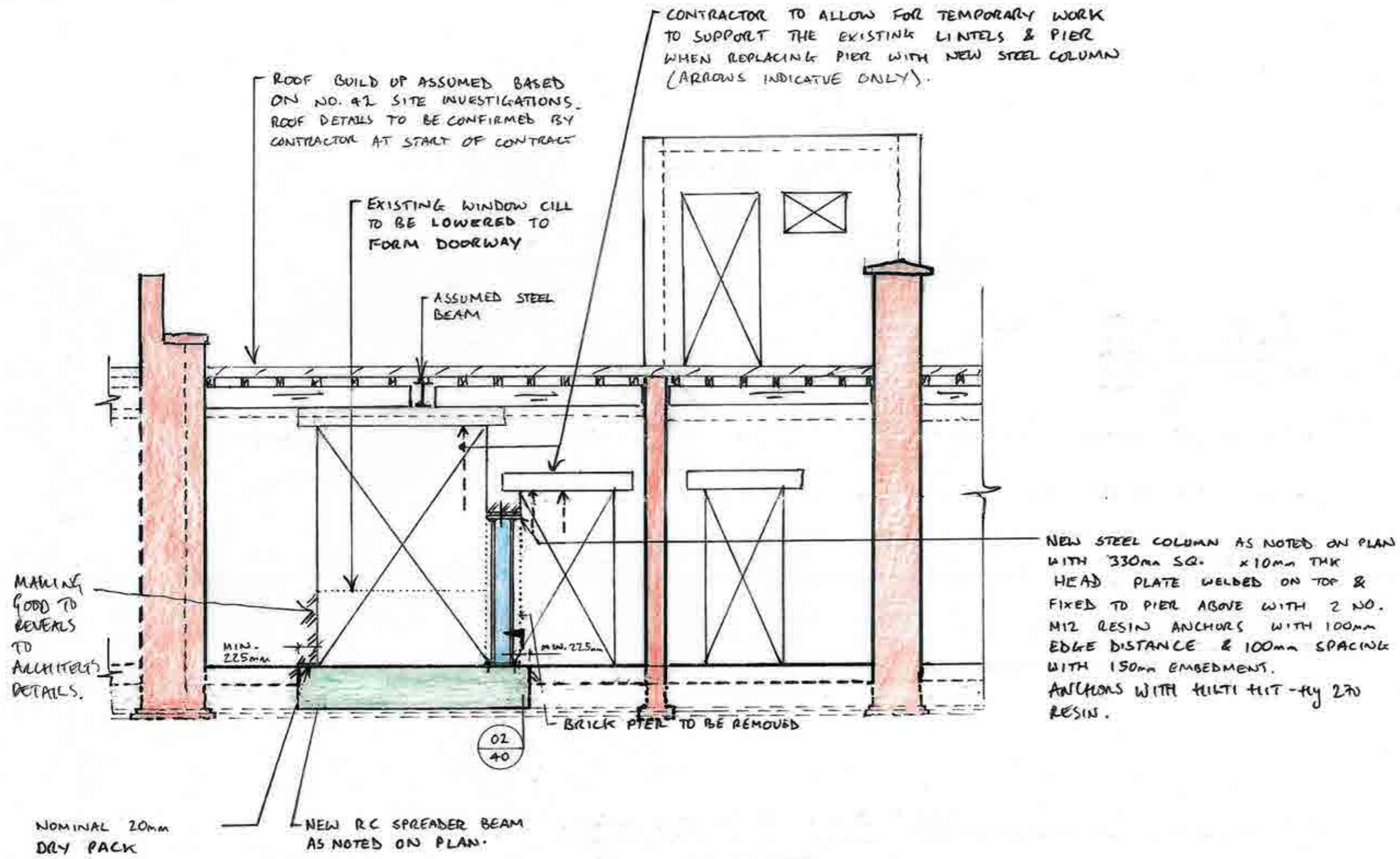
BRITISH MUSEUM
41 RUSSELL SQUARE

DETAILS SHEET 1

drawn AL checked LK
date MAY '18 scale (original - A3) AS NOTED

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1756/705/40



SECTION 05
(1:50)

notes
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41 RUSSELL SQUARE

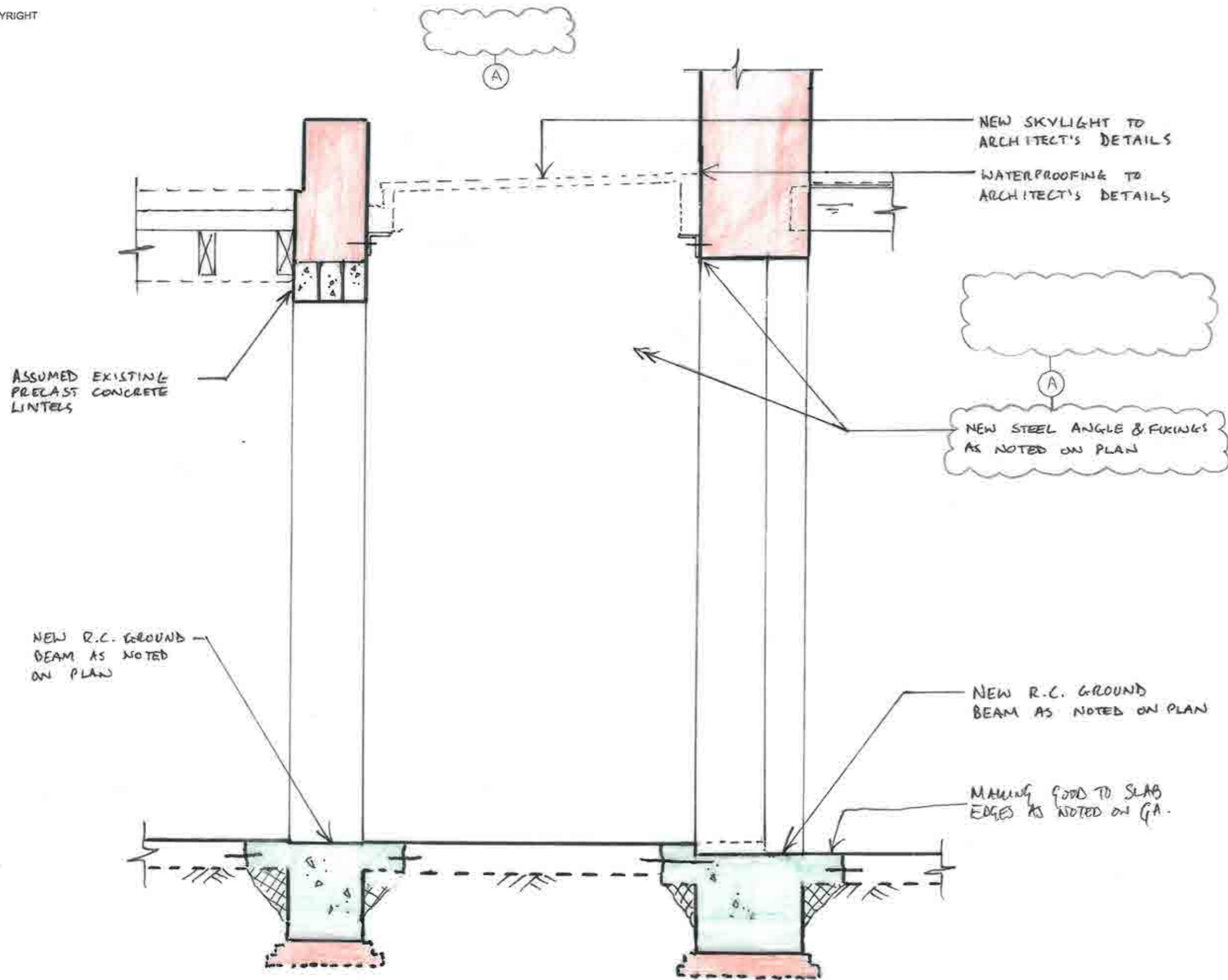
DETAILS SHEET 2

drawn	checked
AL	LK
date	scale (original - A3)
MAY'18	1:50

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1756/705/41	



SECTION 08
(1:20)

notes
1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATION.

A	27.07.18	SKYLIGHT DETAIL AMENDED	AL
-	7.6.18	ISSUED FOR INFORMATION	LK

job
BRITISH MUSEUM
41 RUSSELL SQUARE

title
DETAILS SHEET 3

drawn AL	checked LK
date MAY '18	scale (original - A3) 1:20

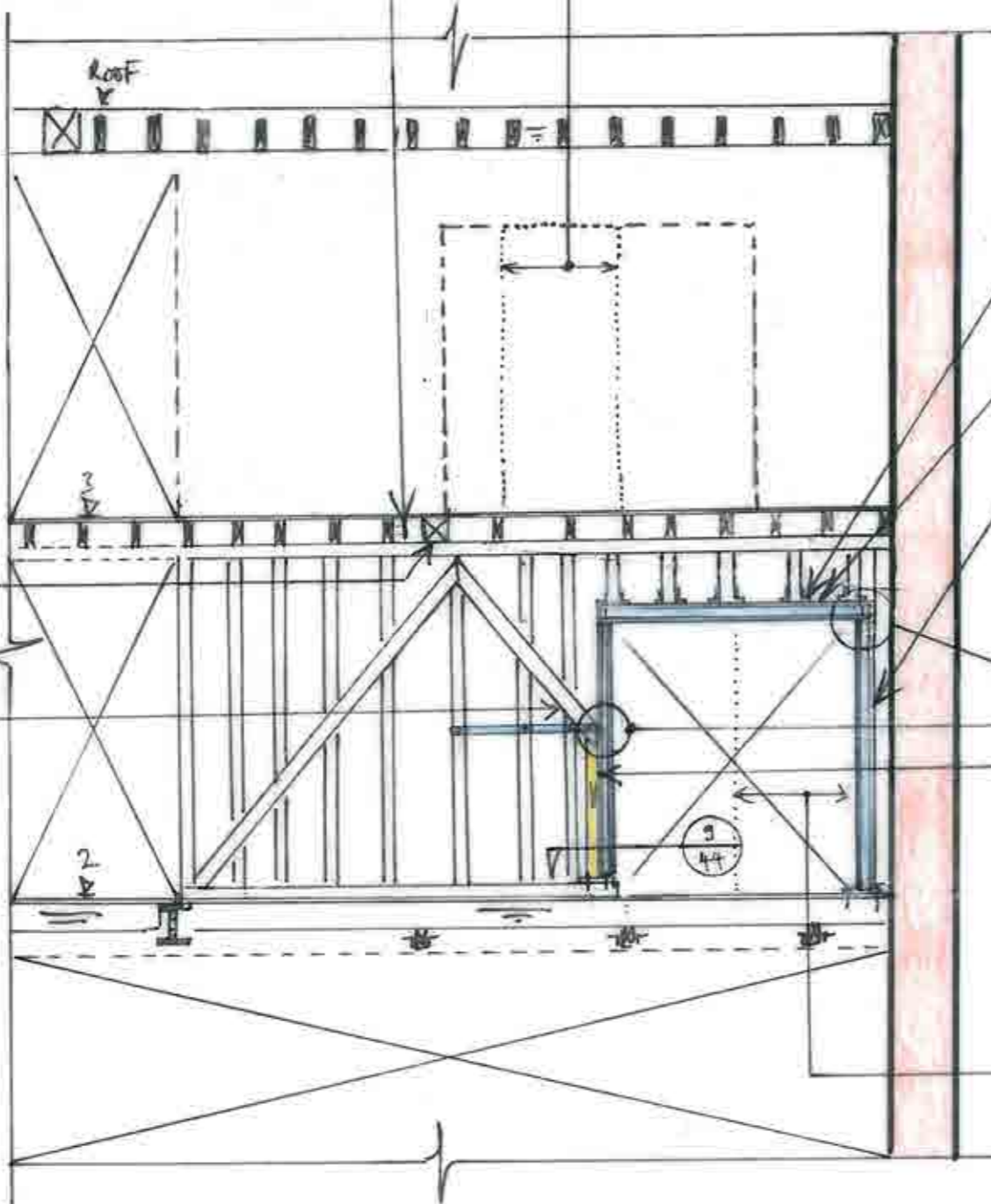
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dra. no. 1756/705/42	rev. A
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ASSUMED TIMBER STUD WALL LAYOUTS BASED ON LIMITED OPENING OF WORKS. ALLOW FOR EXPOSING ENTIRE WALL AND FOR REVIEW OF DESIGN.

OPENING IN PARTITION



STUDS TO BE FIXED TO STEEL BEAMS WITH PAIRS OF 90x90x90 EXPANET BRACKETS FIXED TO STEEL BEAM WITH 4 NO. ϕ 4mm SELF-TAPPING SCREWS

NEW STEEL BEAMS AS NOTED ON G.A'S

NEW STEEL COLUMNS AS NOTED ON G.A'S

ASSUMED PRIMARY BEAM SPANNING ONTO STUD WALL

EXISTING BRACE FIXED TO STEEL POST AND STRAPPED TO EXISTING STUDS AS SHOWN ON DRAWING 44.

NEW TIMBER POST SIZED TO MATCH EXISTING (ALLOW FOR 100mm SILLING) TO BE INSTALLED UNDER EXISTING BRACE.

EXISTING OPENING IN ORIGINAL TIMBER STUD WALL TO BE EXTENDED

SECTION 07
(1:50)

notes

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS AND ENGINEERS DRAWINGS AND THE SPECIFICATION.

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job
BRITISH MUSEUM
41 RUSSELL SQUARE

title
DETAILS SHEET 4

drawn	checked
AL	LK
date	scale (original - A3)
MAY'18	1:50

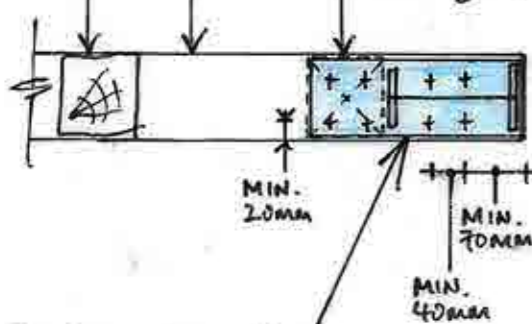
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drg. no.	rev.
1756/705/43	

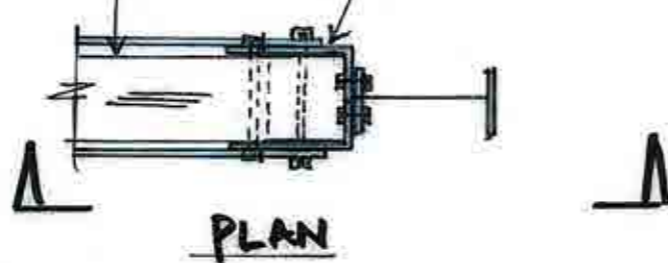
EXISTING STUD
 EXISTING BASE PLATE
 NEW TIMBER POST AS SHOWN ON G18 (SHOWN DASHED FOR CLARITY OF BASE FIXINGS)



NEW STEEL POST FIXED TO EXISTING TIMBER WITH 8 NO. Ø10mm WASH SCREWS LENGTH 80mm, FIXED THROUGH 8mm THICK STEEL BASE PLATE WELDED TO STEEL POST WITH 6mm F.P.F.W.

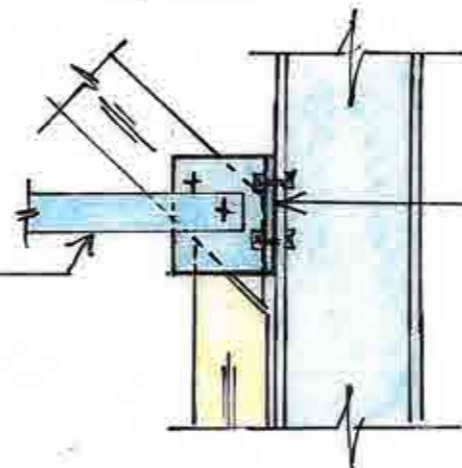
DETAIL 09 (PLAN)

EXISTING BRACE
 NEW STEEL BRACKET FIXED THROUGH TIMBER BRACE WITH 2 NO. M10 BOLTS AT 50mm C/C.



PLAN

NEW STEEL STRAPS 5mm x 30mm FIXED TO BRACKETS THROUGH M10 BOLT, AND FIXED TO MIN. 3 NO. EXISTING STUDS WITH M10 BOLTS.



SECTION

EXISTING BRACE FIXED TO NEW STEEL POST WITH 2 NO. STEEL BRACKETS CUT FROM 150 x 75 x 10 UNEQUAL ANGLES. BRACKETS FIXED TO STEEL FRAME WITH 2 NO. M12 BOLTS.

DETAIL 10

notes

1. DO NOT SCALE FROM THIS DRAWING.
2. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEER'S AND ARCHITECT'S DRAWINGS AND SPECIFICATIONS.

- 7.6.18 ISSUED FOR INFORMATION LK

job
**BRITISH MUSEUM
 41 RUSSELL SQUARE**

title
 DETAILS SHEET 5

drawn
 LK
 checked
 date
 JUNE '18
 scale (original - A3)
 1:10

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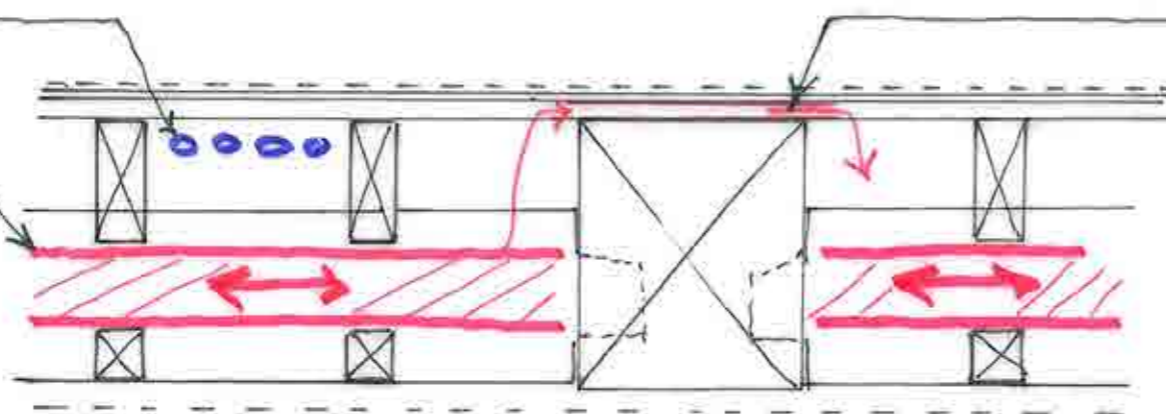
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orig. no.
1756/705/44

rev.

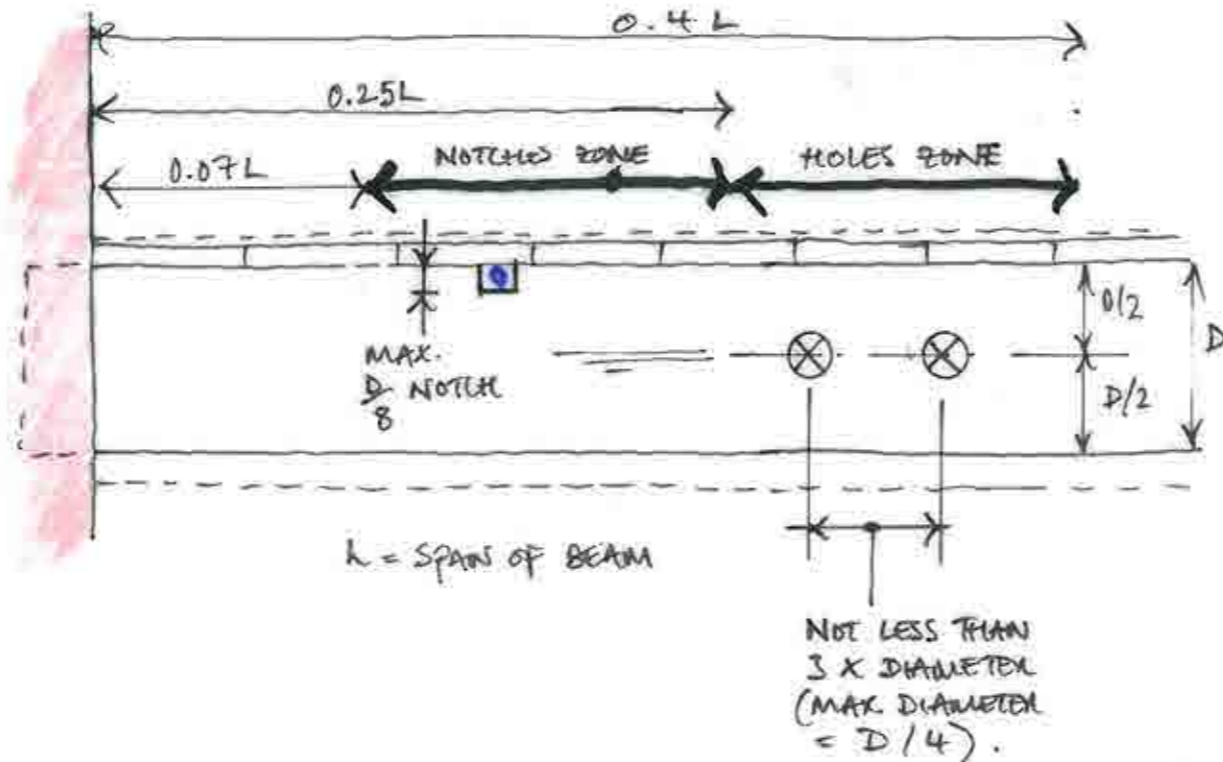
SERVICES ZONE PARALLEL TO JOISTS.

SERVICES ZONE BETWEEN LULLING JOISTS AND FLOOR JOISTS.



NO SIGNIFICANT SERVICES SHOULD CROSS PRIMARY TIMBER BEAMS. WHERE SINGLE SMALL DIAMETER PIPE NEED TO PASS PRIMARY BEAMS LOCALLY, PIPES TO RUN OVER BEAMS IN DEPTH OF FINISHES - ALTERNATIVELY, PIPES TO FOLLOW EXISTING SERVICES ROUTES.

1. SERVICES STRATEGY - TYPICAL FLOOR



- SERVICES TO RE-USE EXISTING ROUTES WHERE POSSIBLE

- NOTCHING OF FLOOR BEAMS TO BE AVOIDED WHERE POSSIBLE AS SHOWN ABOVE FOR PRIMARY BEAMS.

2. SERVICES STRATEGY - SINGLE TOISTED FLOOR

1. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTS & ENGINEERS DRAWINGS & SPECIFICATIONS.
2. SERVICES ROUTES AND INTEGRATION WITH FLOORS ARE TO BE CONFIRMED WITH MBE ENGINEER FOLLOWING EXPOSURE OF FLOOR ARRANGEMENTS. ALL NOTCHING TO BE AGREED WITH S.E.

3.7.19	ISSUED FOR INFORMATION	LK
JOB BRITISH MUSEUM 41-43 RUSSELL SQUARE		
TITLE SERVICES INTEGRATION		
drawn LK	checked FW	scale (original - A3) 1:10
date July '19		

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drg. no. 1756/205/036	rev.
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Appendix 3 – Site Investigations

'703 THE BRITISH MUSEUM

RUSSSELL SQUARE




SITE INVESTIGATIONS OPENING UP SCHEDULE

CONTRACTOR TO ALLOW FOR:

- LIFTING FLOOR BOARDS TO EXPOSE APPROXIMATE AREA INDICATED. THIS MAY REQUIRE MORE THAN 1 NO. BOARD TO BE LIFTED. IF BOARDS ARE TONGUE & GROOVE, THE CONTRACTOR IS TO SEEK INSTRUCTION FROM THE CA, PRIOR TO COMMENCING.
 - MAKING GOOD ONCE OPENINGS HAVE BEEN RECORDED BY THE DESIGN TEAM. MAKE GOOD TO MATCH EXISTING.
 - HIGH LEVEL ACCESS PLATFORMS TO ACCESS SOFFITS WHERE APPROPRIATE.
 - ALLOW ABA TO ATTEND SITE 48 HOURS AFTER OPENING UP WORKS ARE COMPLETE. PROTECTION TO BE PROVIDED IN THE TEMPORARY CASE BY THE CONTRACTOR.
 - THE BUILDING IS STILL IN USE. THE CONTRACTOR IS RESPONSIBLE FOR CHECKING FOR LIVE SERVICES PRIOR TO OPENING UP.
 - ADDITIONAL
 - 1 #  0.4m x 0.4m FLOOR OPENING UP
 - 1 #  0.4m x 0.4m SOFFIT OPENING UP
 - 1 #  0.4m x 0.4m WALL OPENING UP
- TBC BY ABA SUBJECT TO FINDINGS OF THE SCHEDULED OPENING UP

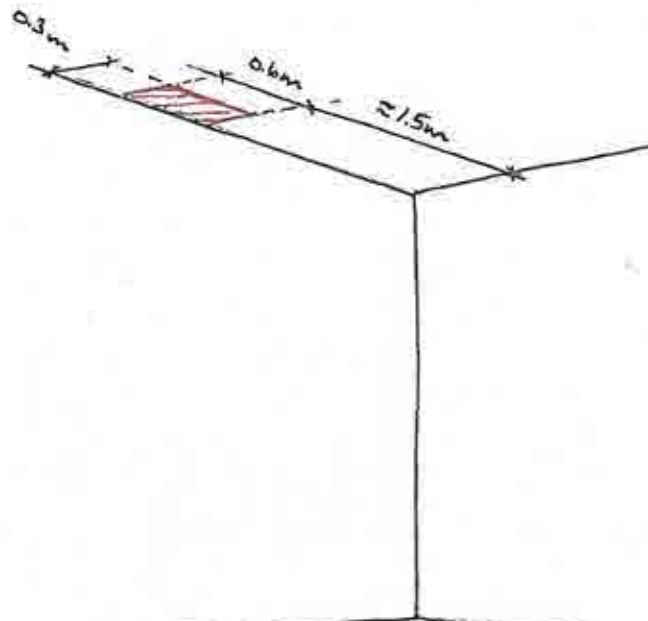
THIS IS A GRADE II LISTED BUILDING AND THE WORKS ARE TO BE UNDERTAKEN CAREFULLY TO AVOID DAMAGING LISTED FABRIC

KEY

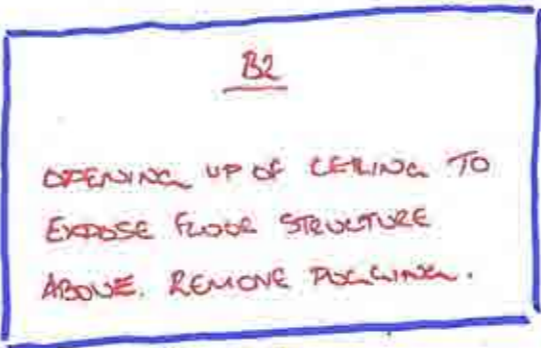
-  OPENING UP TO FLOOR, LIFTING FLOOR BOARDS
-  OPENING UP TO SOFFIT. REMOVE EXISTING PLASTER FINISHES BUT NOT ANY DECORATIVE FEATURES
-  OPENING UP TO WALL. REMOVE EXISTING FINISHES BUT NOT ANY DECORATIVE FEATURES

ALL OPENINGS TO BE 0.4m x 0.4m UNLESS SPECIFIED OTHERWISE

B1 - 3D VIEW OF CEILING

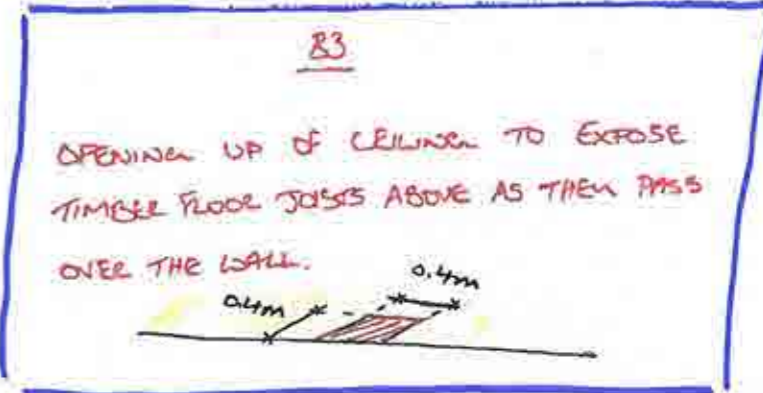


REMOVE CEILING FINISHES
 REMOVE CONCRETE TO
 EXPOSE STEEL REINFORCEMENT
 OR BEAMS.
 ALLOW FOR D/D TO BE EXTENDED
 AND/OR DEEPENED



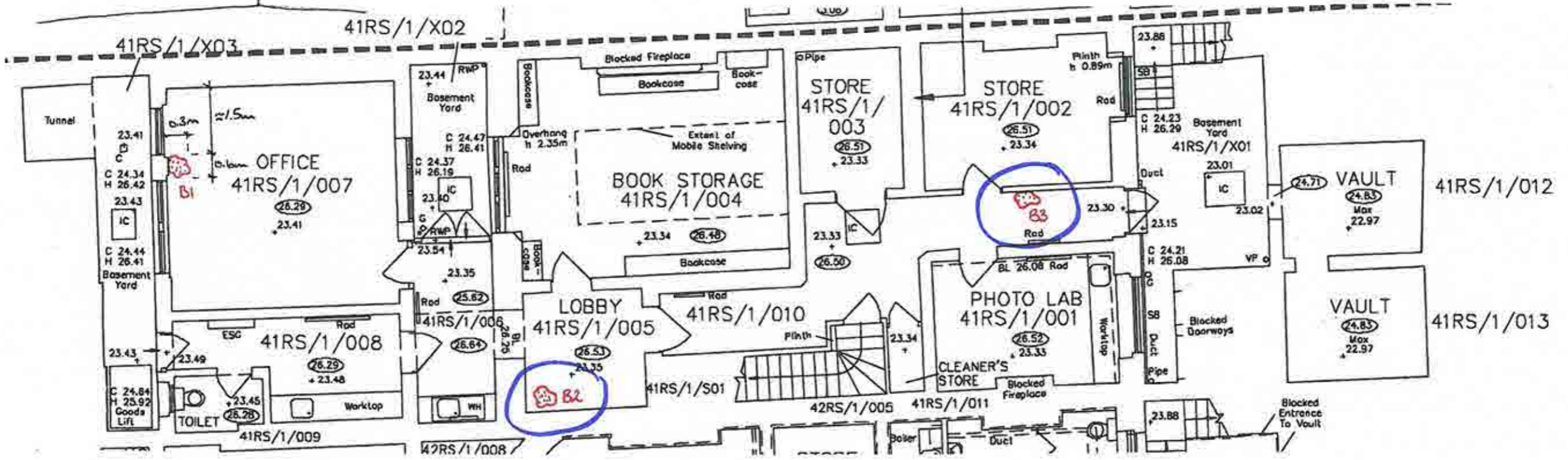
OPENING UP OF CEILING TO
 EXPOSE FLOOR STRUCTURE
 ABOVE. REMOVE PLASTER.

PRIORITY



OPENING UP OF CEILING TO EXPOSE
 TIMBER FLOOR JOISTS ABOVE AS THEY PASS
 OVER THE WALL.

PRIORITY



BASEMENT

C1

OPEN UP FLOOR.
LIFT FLOOR BOARDS TO CREATE
400mm x 400mm OPENING IN
FLOOR NEXT TO LATH TO EXPOSE
FLOOR STRUCTURE. REMOVE
REINFORCEMENT.



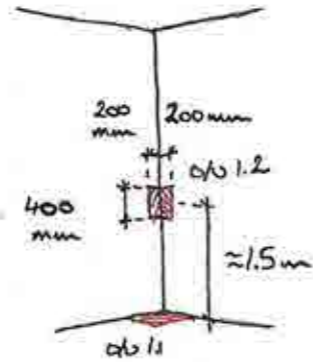
CREATED FLOOR

1.1

OPEN UP FLOOR.
LIFT FLOOR BOARDS TO
CREATE 400mm x 400mm
OPENING IN FLOOR NEXT
TO WALL TO EXPOSE FLOOR
STRUCTURE. REMOVE FINISHES.

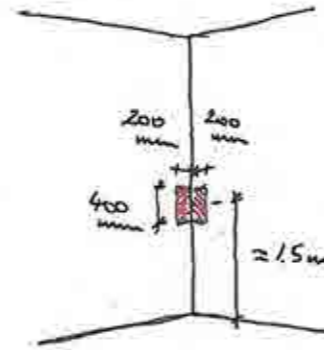
1.2

REMOVE FINISHES FROM WALL
IN CORNER TO EXPOSE MASONRY



1.3

REMOVE FINISHES FROM WALL
IN CORNER TO EXPOSE MASONRY



1.4

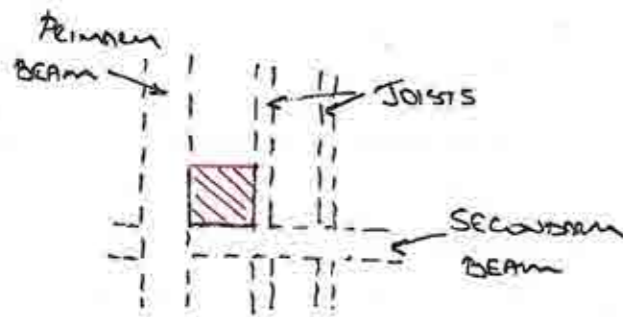
AS PER O/V 1.3

1.5

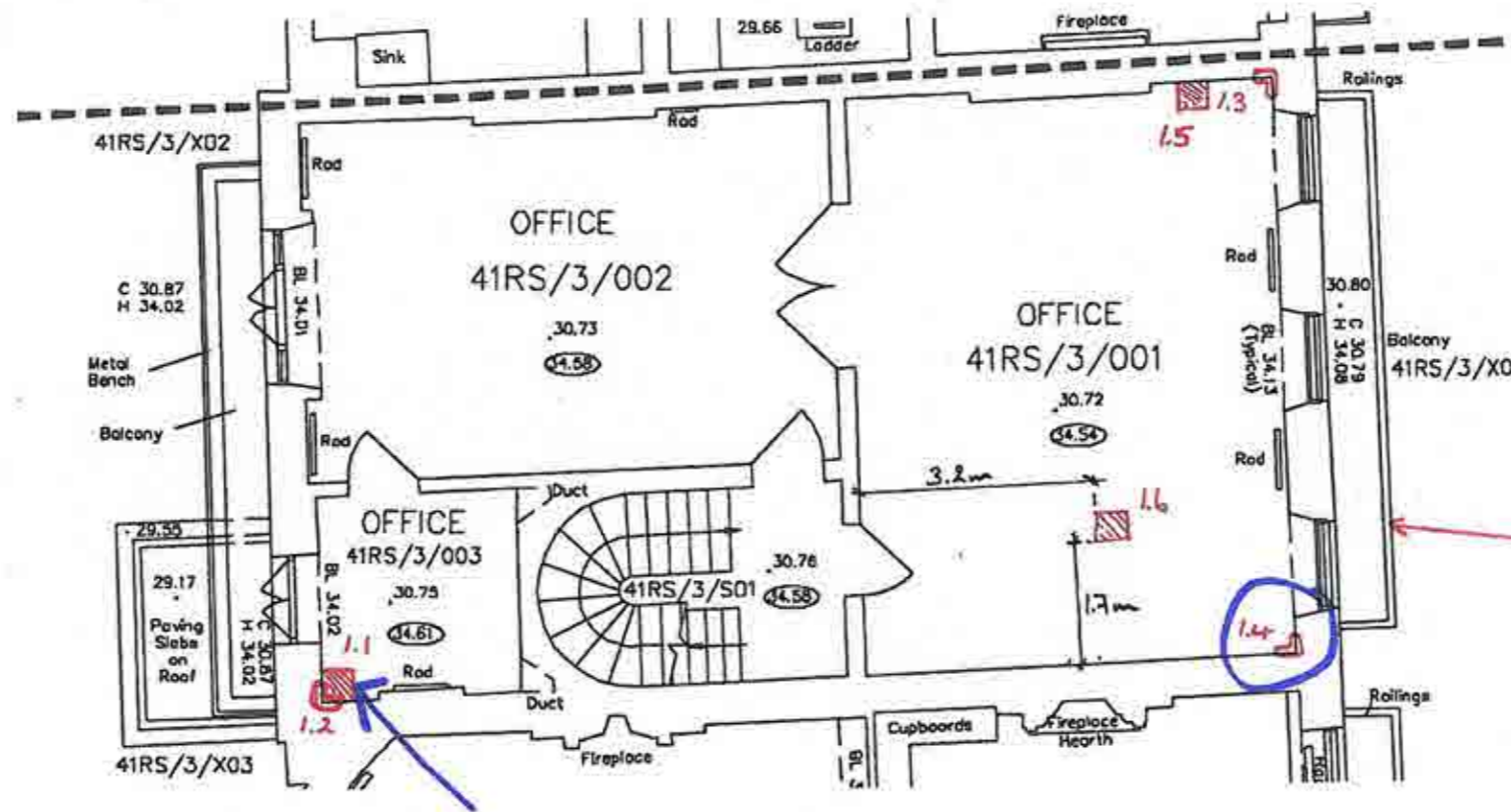
AS PER O/V 1.1

1.6

OPEN UP FLOOR.
CREATE INITIAL SMALL OPENING
TO CONFIRM LOCATION IS CORRECT.
OPENING UP TO IDENTIFY PRIMARY
AND SECONDARY BEAMS AND JOISTS
AS SHOWN BELOW.
FINAL OPENING UP TO BE 400mm
x 400mm. LIFT FLOOR BOARDS AND
REMOVE FINISHES.



PLAN

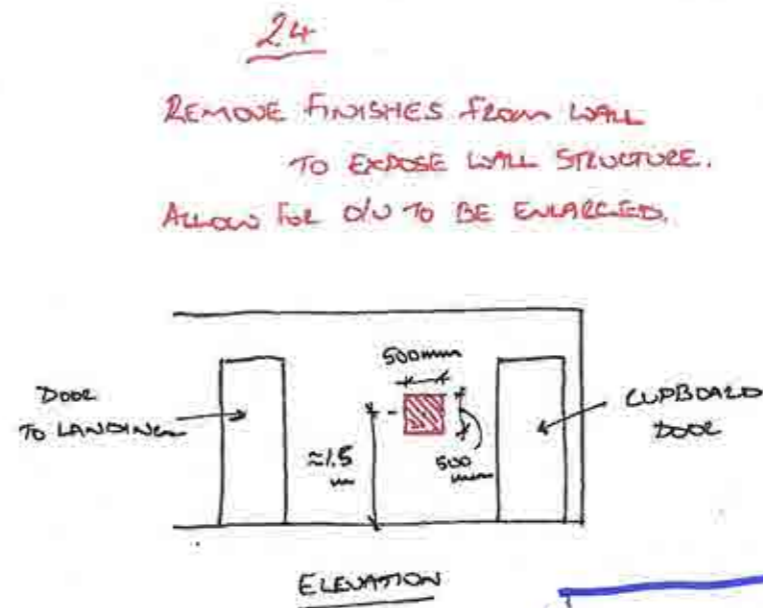
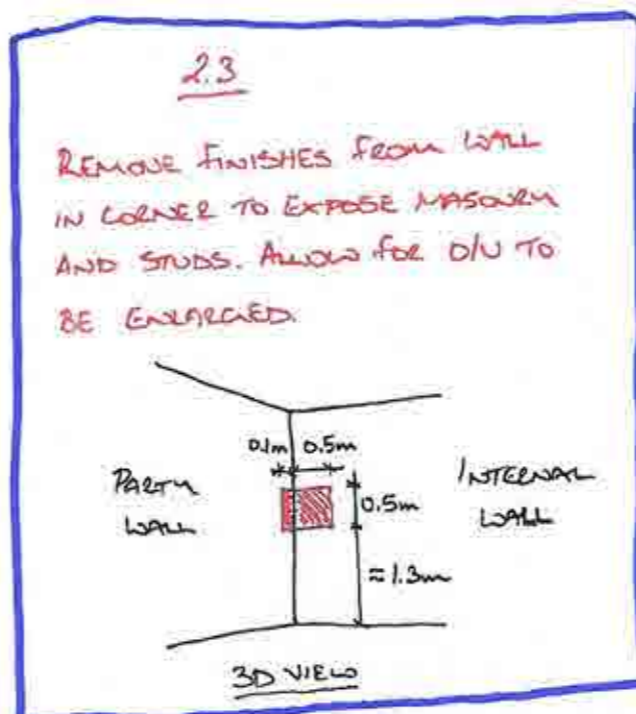


TIMBER SURVEN TO
BALCONY BY SPECIALIST.
REQUIREMENTS COVERED
SEPARATELY

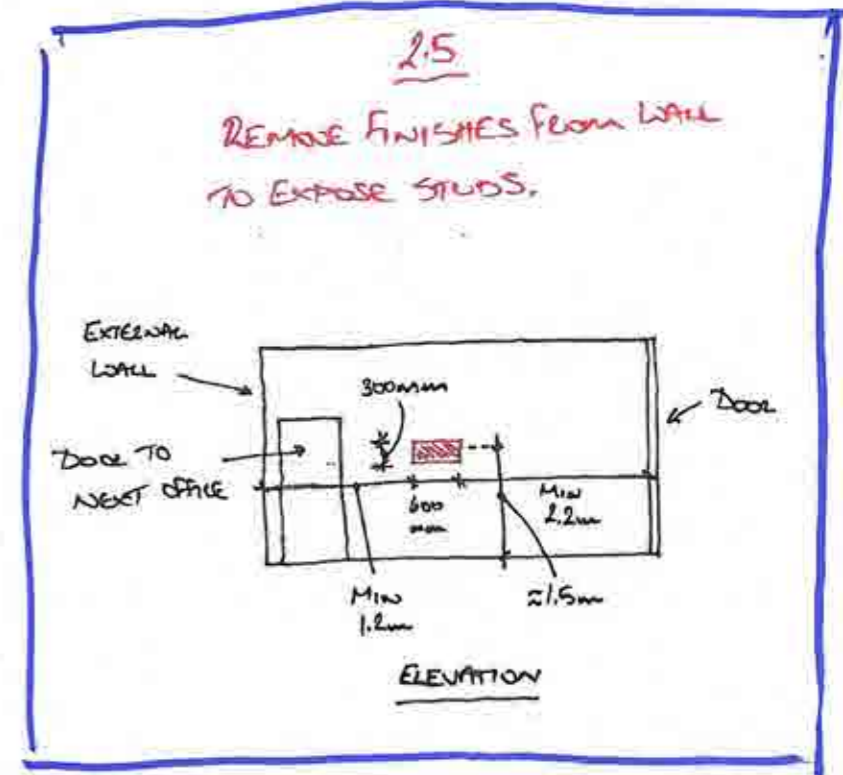
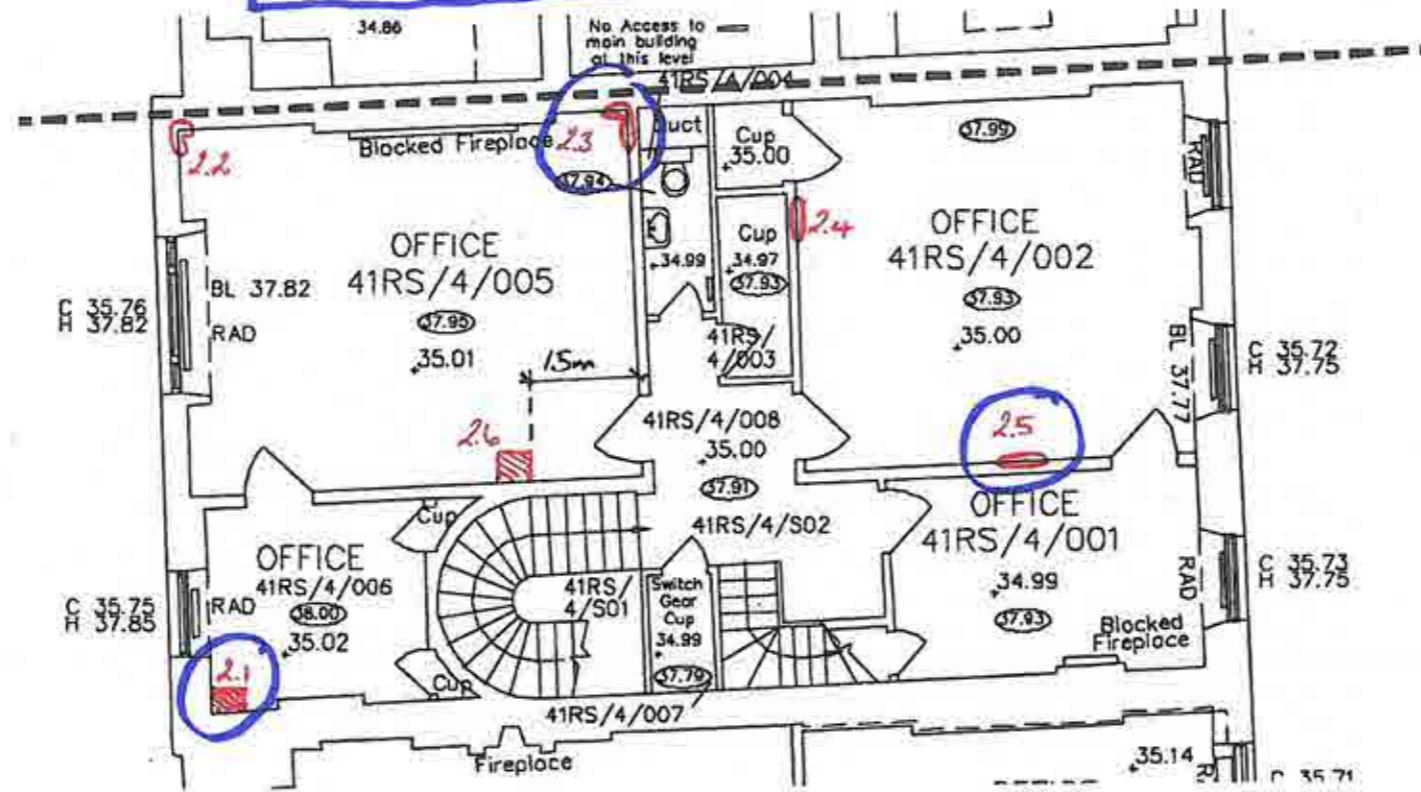
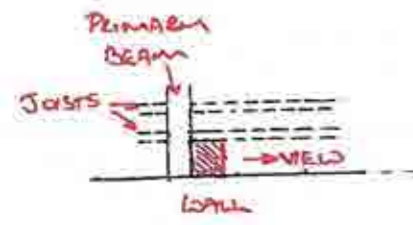
FIRST FLOOR

2.1
AS PER D/U 1.1 ON
FIRST FLOOR

2.2
AS PER D/U 1.3
ON FIRST FLOOR

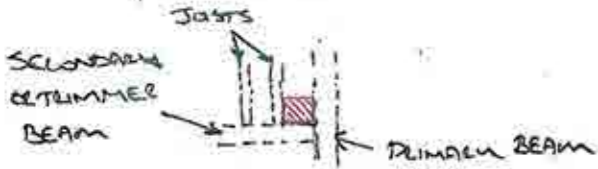


2.6
OPEN UP FLOOR
LIFT FLOOR BOARDS TO CREATE
400mm x 400mm OPENING.
REMOVE FINISHES.
OPENING UP TO EXPOSE PRIMARY
BEAM AND JOISTS AND VIEW
PRIMARY BEAM BELOW STUD WALL
AS SHOWN BELOW.



3.1

AS PER O/U 1.6 ON
FIRST FLOOR.



3.2

AS PER O/U 1.2 ON
FIRST FLOOR.

3.3

AS PER O/U 1.3 ON
FIRST FLOOR

3.4

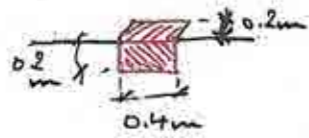
AS PER O/U 1.3 ON
FIRST FLOOR

3.5

AS PER O/U 2.5 ON
SECOND FLOOR.

3.6

OPEN UP TOP OF
WALL AND CEILING
AS SHOWN TO
EXPOSE WALL &
CEILING STRUCTURE.



TO BE CONFIRMED
FOLLOWING ACCESS
TO ROOF
(SEE BOX NOTE)

3.7

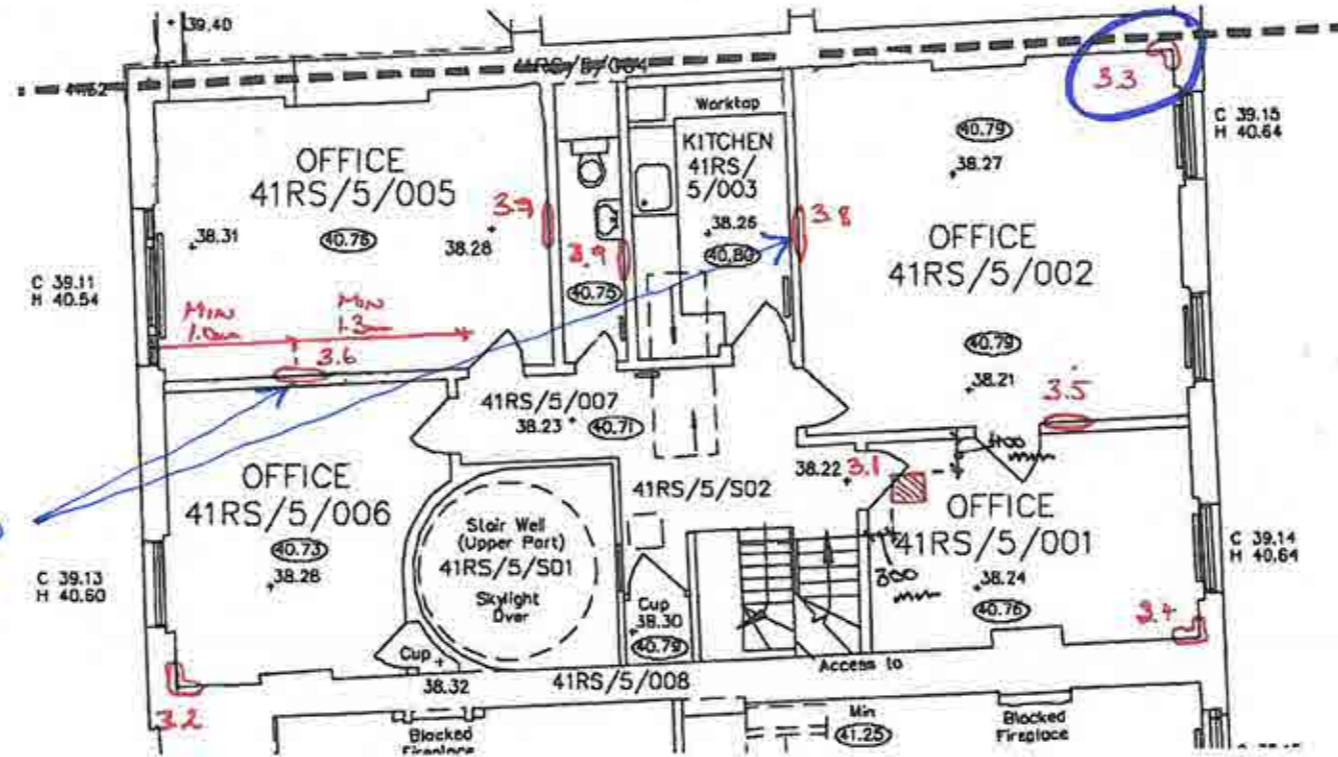
AS PER O/U 2.5 ON
SECOND FLOOR

3.8

AS PER O/U 2.5 ON
SECOND FLOOR

3.9

AS PER O/U 2.5 ON
SECOND FLOOR



ALLOW FOR 2 NO. OPENINGS
TO WALLS/CEILING (AS PER
3.6) FOLLOWING
ABA ACCESS TO ROOF

3rd Floor

