

3.10 Construction Sequence

The final construction sequence will be determined at a later stage alongside the chosen main contractor. Enabling works will be necessary to make the building safe as a construction site.

It is anticipated that the installation of the proposed reinforced concrete (RC) structural topping will be one of the first items of structural works. Initially it is proposed that this be undertaken on a bay-by-bay basis, with a robust crash-deck below supported on the beam lines below. The top surface of the vaults is likely to require some watering before the placing of the concrete. Continuity of steel reinforcement will be provided across all day-joints. As experience and confidence is gained by the contractor in the proposed construction method, the extent of the crash-deck propping may be reduced (or suitable safety netting provided) and larger pour areas considered.

Once the topping works are completed, the new stabilising cross-bracing should be installed along with the LGF RC shear walls.

The atria can then be formed, using suitably back-propped crash-decks. The works are to be carefully undertaken, to not damage the brittle cast-iron columns and the floor beams which are needed to be recycled for the new roof level supports.

With the atria formed, the centre of the building will be exposed to the weather. The next anticipated works are the forming of the roof over the atria. This roof is to be laterally restrained by the light steel gauge penthouse structure in the permanent condition and therefore temporary lateral bracing will be required.

For the mill building, the formation of the box-frame openings and the installation of the penthouse level can then be progressed.

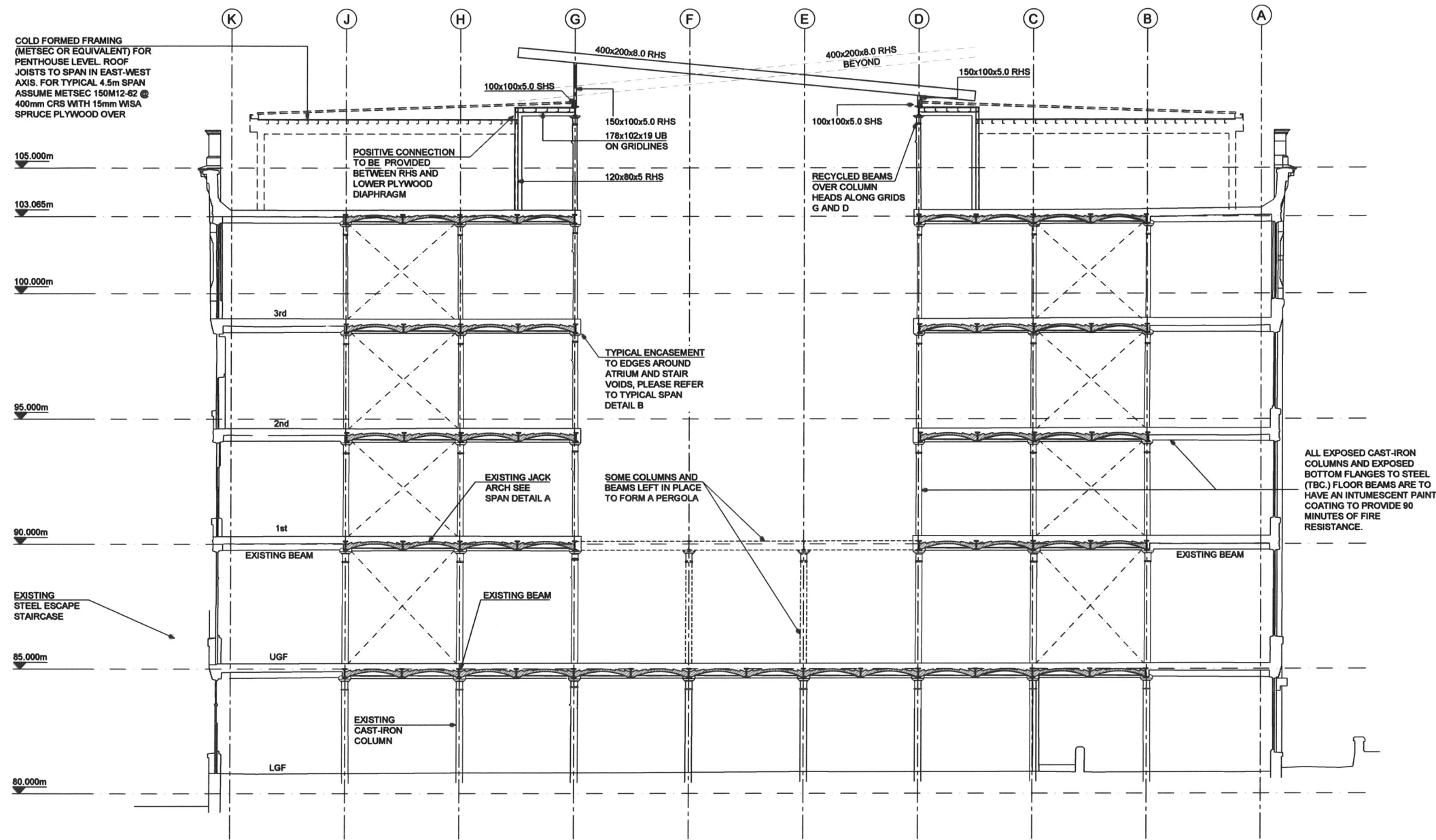
4.0 Heritage and Sustainability

The underlying principle behind the proposed works has been the conservation of the listed structure and safeguarding the building for the long-term.

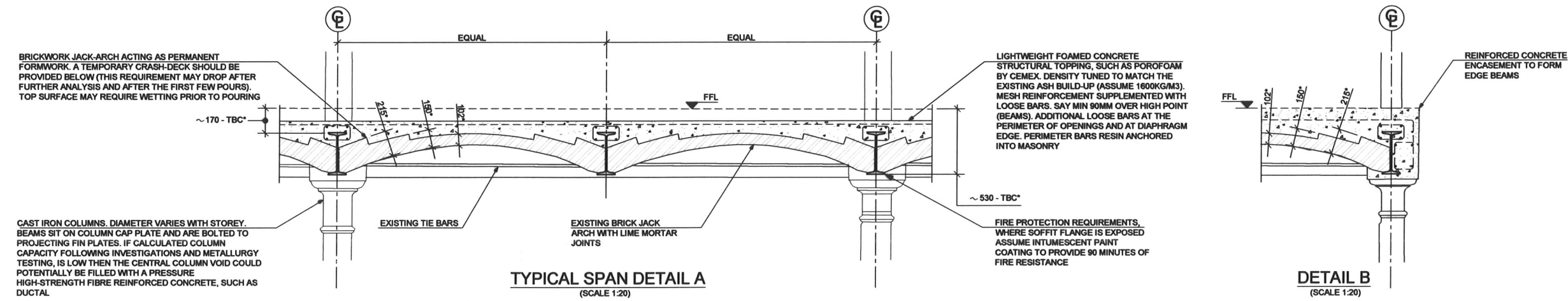
The necessary proposed conversions are sympathetic to the original building and are minimal interventions. The proposed demolition works are minimised but allow the project to be viable. It is proposed that some steel and cast-iron sections removed during the forming of the atria be recycled for the new main roof supports.

Much of the rope race is to be retained, as an important historical feature.

The cast-iron and steel beams are to be retained and expressed, as are the perimeter jack-arch barrel vaults.



SECTION A - A
(SCALE 1:100)



TYPICAL SPAN DETAIL A
(SCALE 1:20)

DETAIL B
(SCALE 1:20)

- NOTES
1. This drawing is to be read in conjunction with all relevant architects', engineers', and specialists' drawings, bills of quantities and specifications.
 2. Do not scale off this drawing.
 3. All dimensions are to be confirmed on site by the contractor.
 4. Refer to MHA drawing 130 for all general notes.

P3	14/07/23	PJD	RD	FURTHER UPDATE TO ARCHS DETAILS
P2	24/01/22	PJD	RD	UPDATED TO BUI LATEST ARCHITECTS LAYOUT
P1	21/1/21	PJD	RD	PRELIMINARY ISSUE

Rev	Date	Drawn	Checked	Amendments
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Status

PRELIMINARY

MHA STRUCTURAL DESIGN

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Project Title

**WARWICK MILL
MIDDLETON
M24 1AZ**

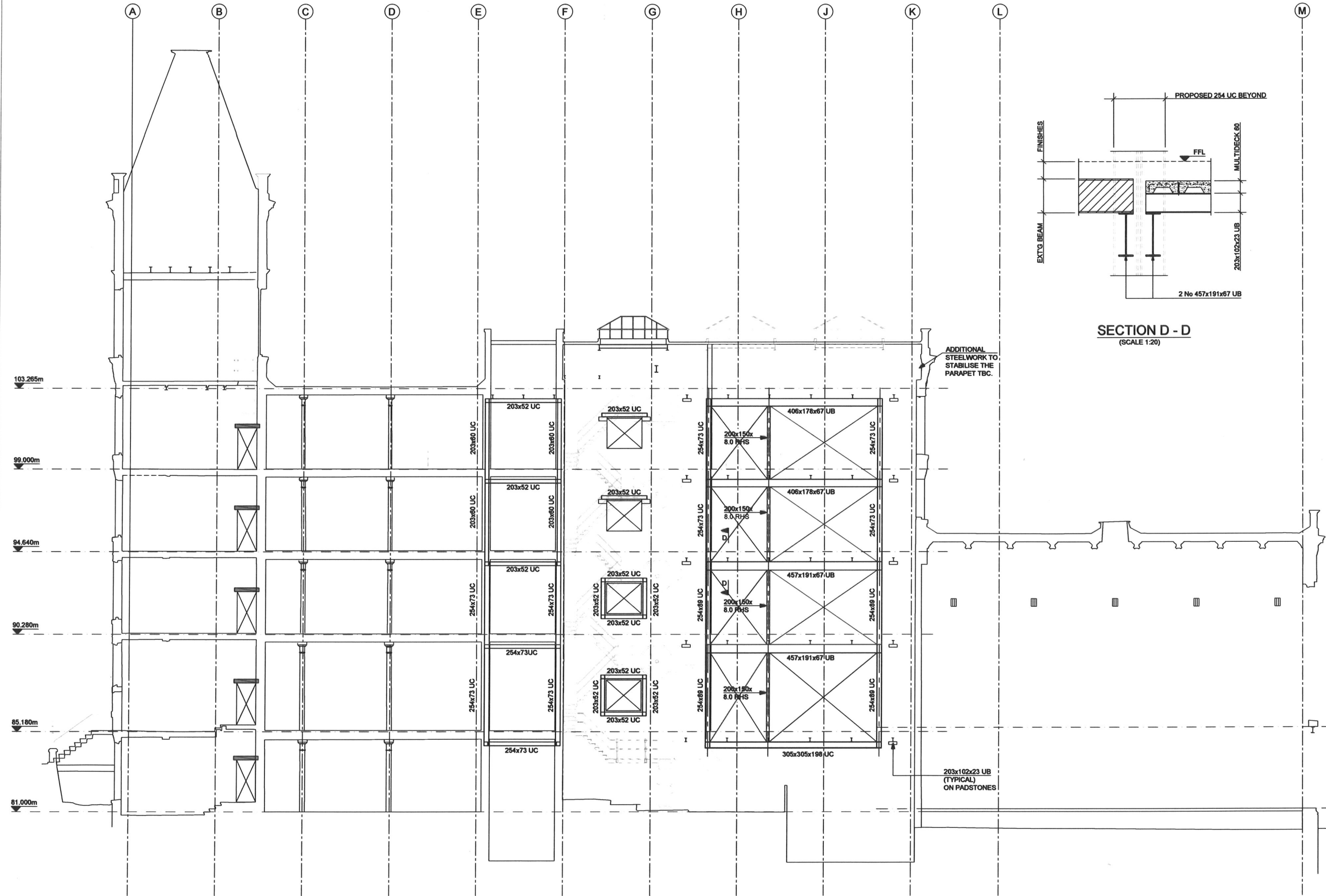
Drawing Title

PROPOSED SECTION A - A

Drawing No.

21008-200

Scale	Drawn	Checked
1:150 @ A1	PJD	RD
Project No	Drawing No	Revision
21008	200	P3



SECTION C - C
(SCALE 1:100)

SECTION D - D
(SCALE 1:20)

- NOTES
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P3	14/07/23	PJD	RD	FURTHER UPDATE TO ARCHS DETAILS
P2	24/01/22	PJD	RD	UPDATED TO REF LATEST ARCHITECTS LAYOUT
P1	21/12/21	PJD	RD	PRELIMINARY ISSUE

Rev	Date	Drawn	Checked	Amendments
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Status
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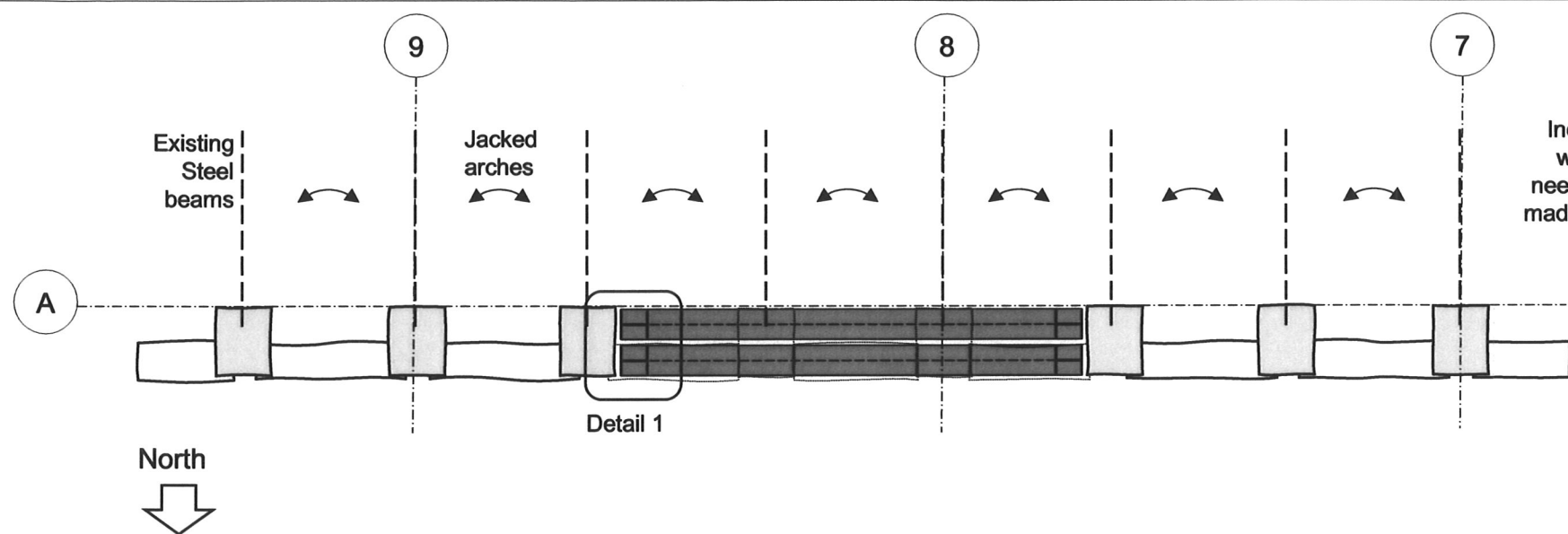
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Project Title
**WARWICK MILL
MIDDLETON
M24 1AZ**

Drawing Title
PROPOSED SECTION C - C

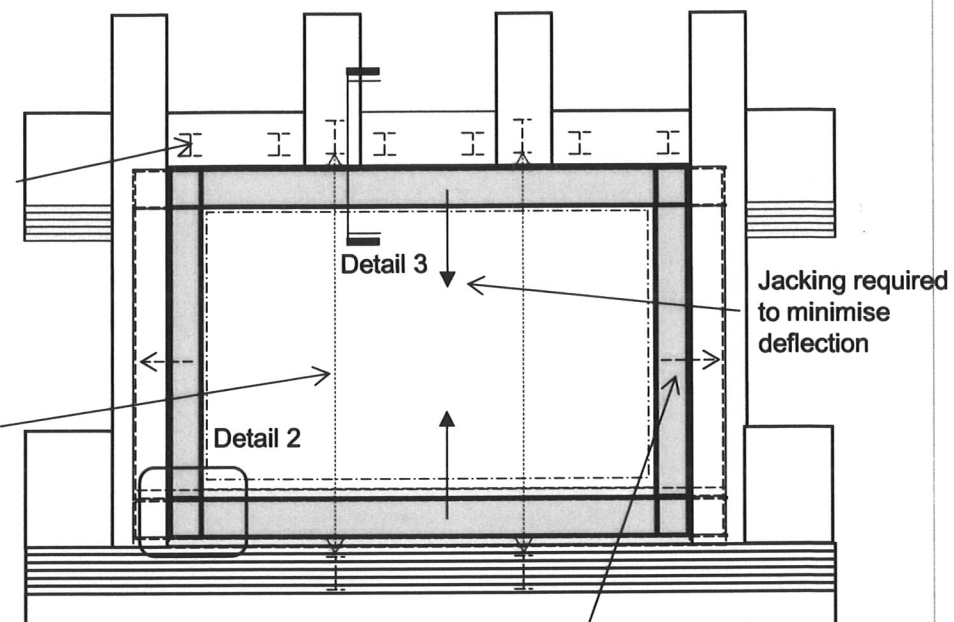
Drawing No.
21008-202

Scale	Drawn	Checked
1:150 @ A1	PJD	RD
Project No	Drawing No	Revision
21008	202	P3



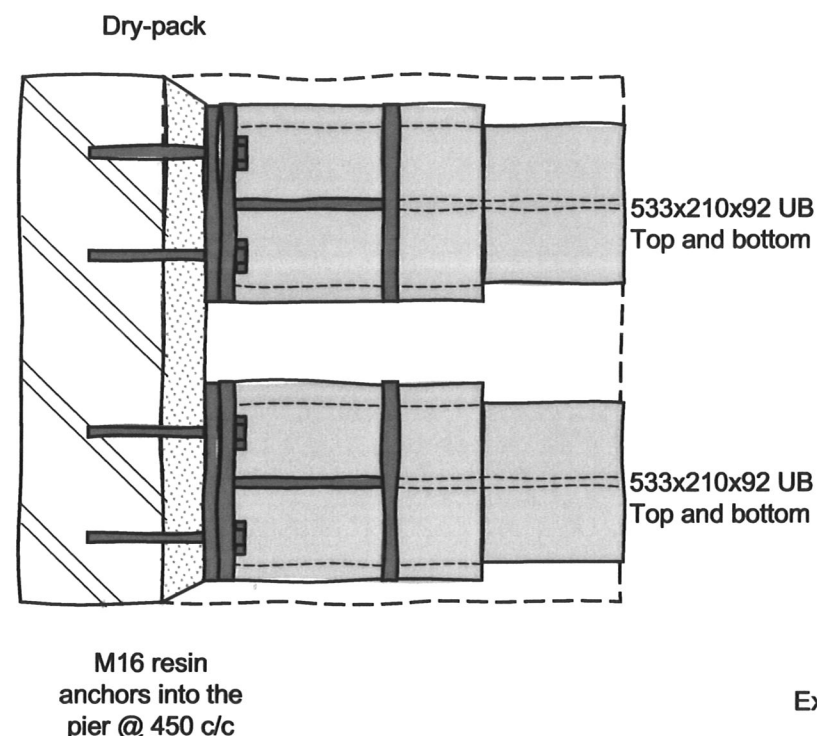
PLAN

Indicative temporary works. Brickwork in needle locations to be made good. Sequence to be developed.

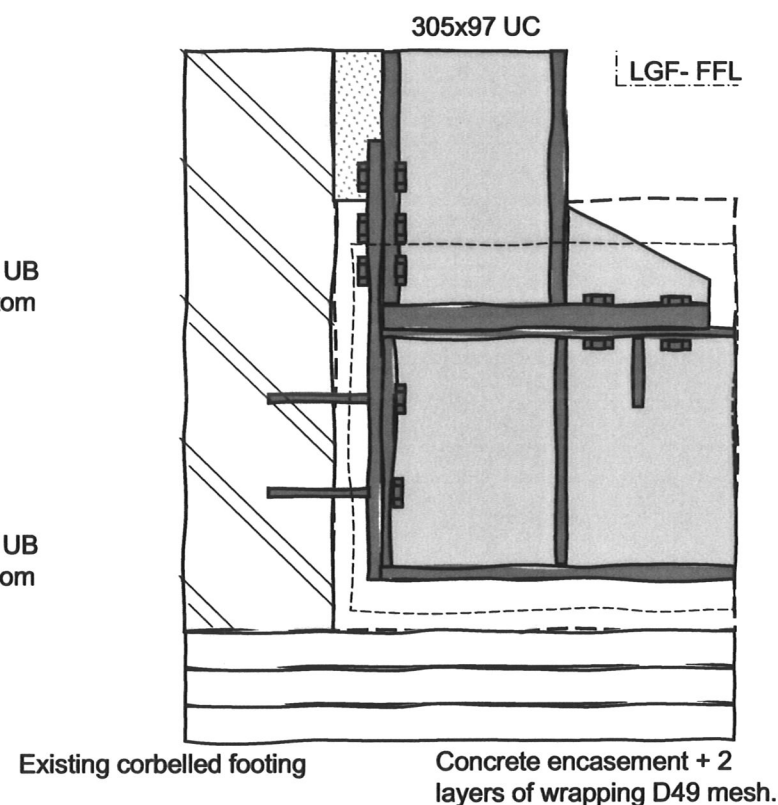


ELEVATION

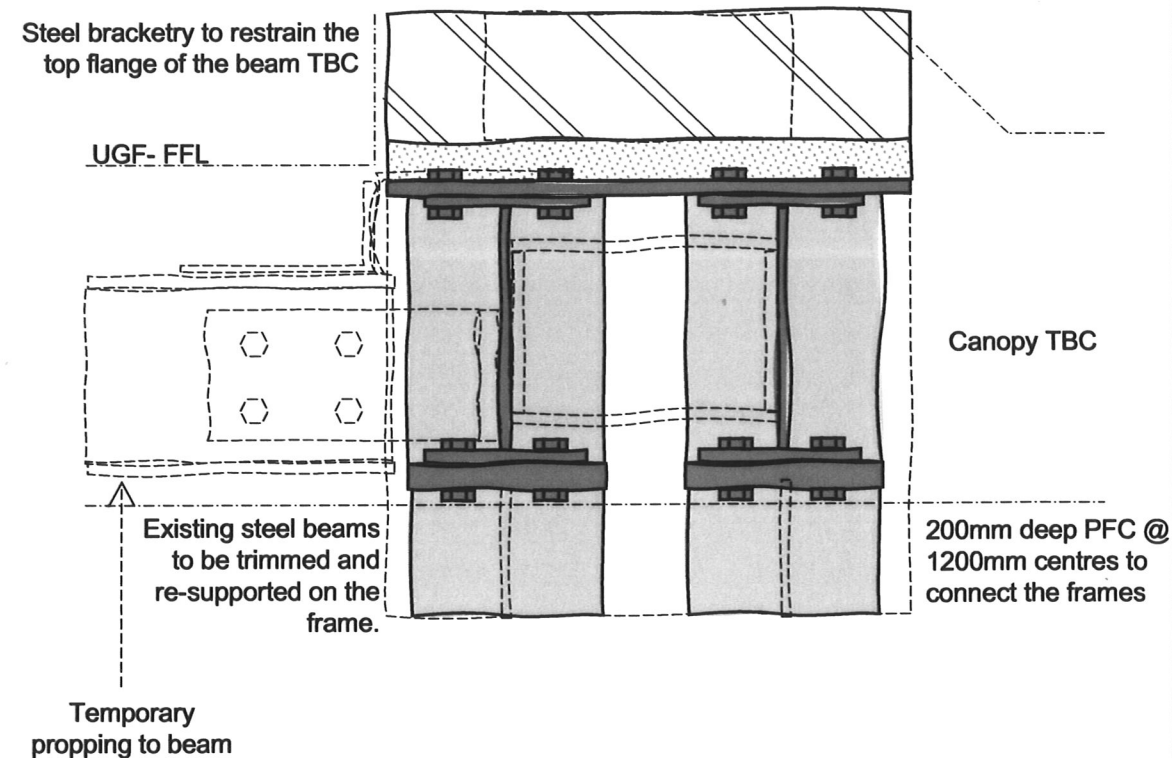
If frame is to be positioned within pier then column size will increase to 305x305x118UC. Temporary works will also be more complicated and more expensive



DETAIL 1



DETAIL 2



DETAIL 3

Notes

1. This drawing is to be read in conjunction with all architect's and engineers drawings and specifications.
2. Do not scale this drawing. All dimensions and levels to be confirmed on site.
3. All steel to be s355.

Rev	Date	Drawn	Checked	Amendments
A	07.23	MC	RD	FORMATTING
Status PRELIMINARY				

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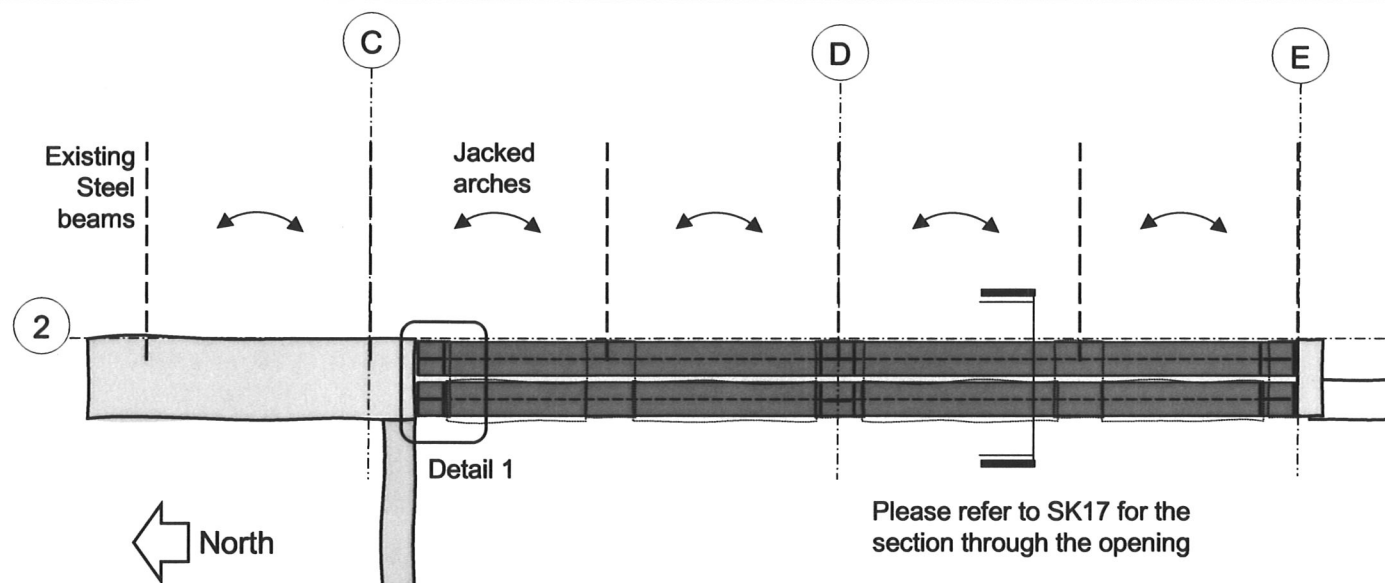
Job Title
Warwick Mill, Middleton, M24 1AZ

Drawing Title
Entrance Frame

Job No./Drg No.
21008/ SK13

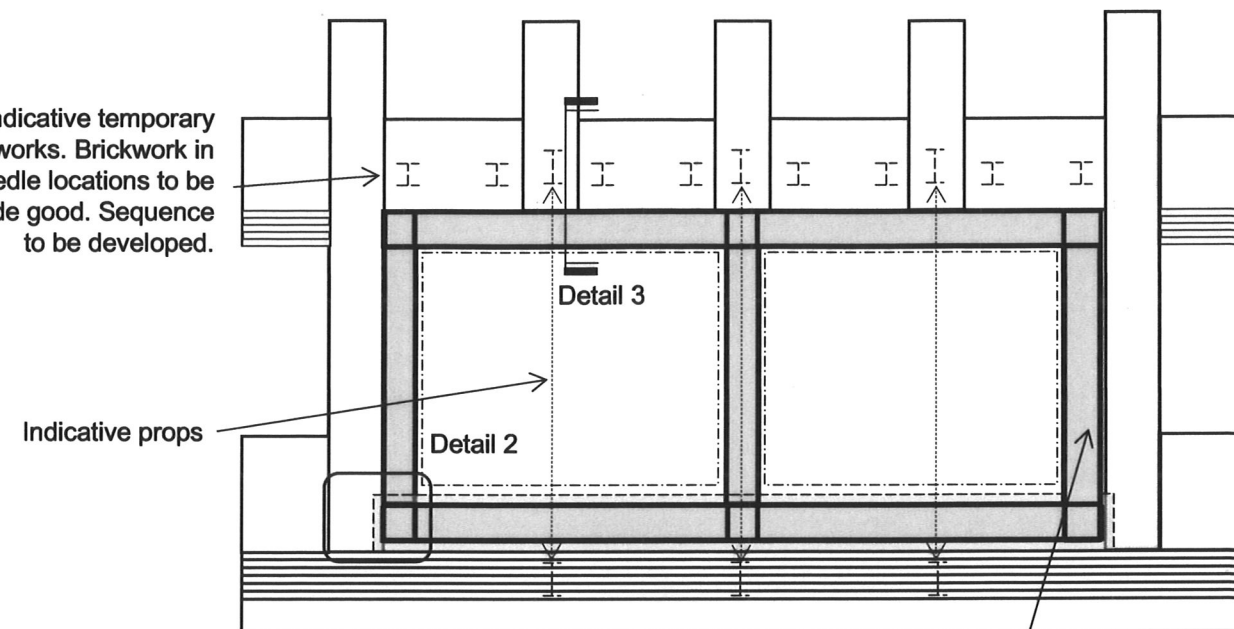
Revision
A

Scale @ A3
NTS



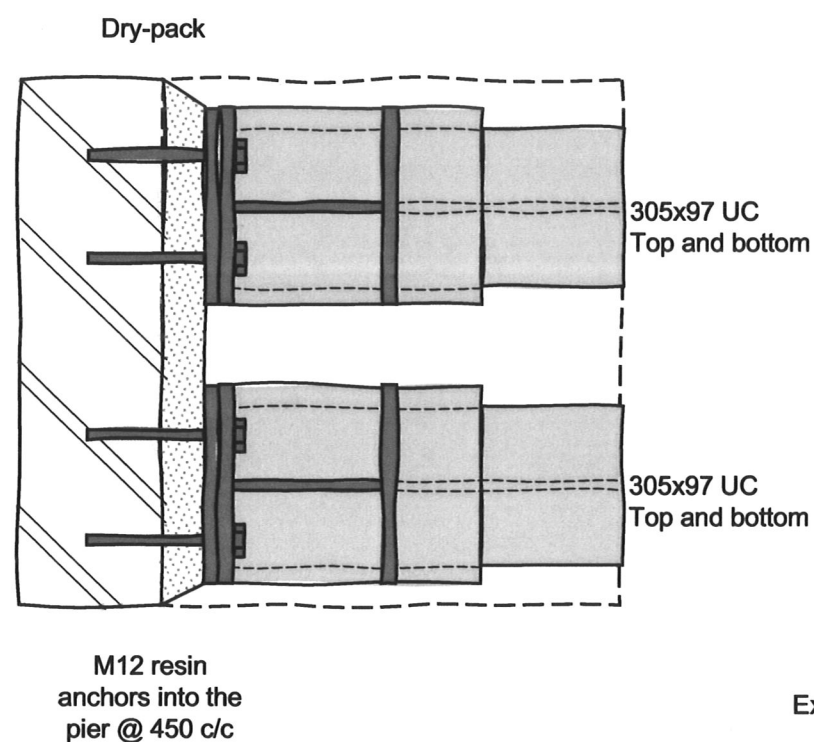
PLAN

Indicative temporary works. Brickwork in needle locations to be made good. Sequence to be developed.

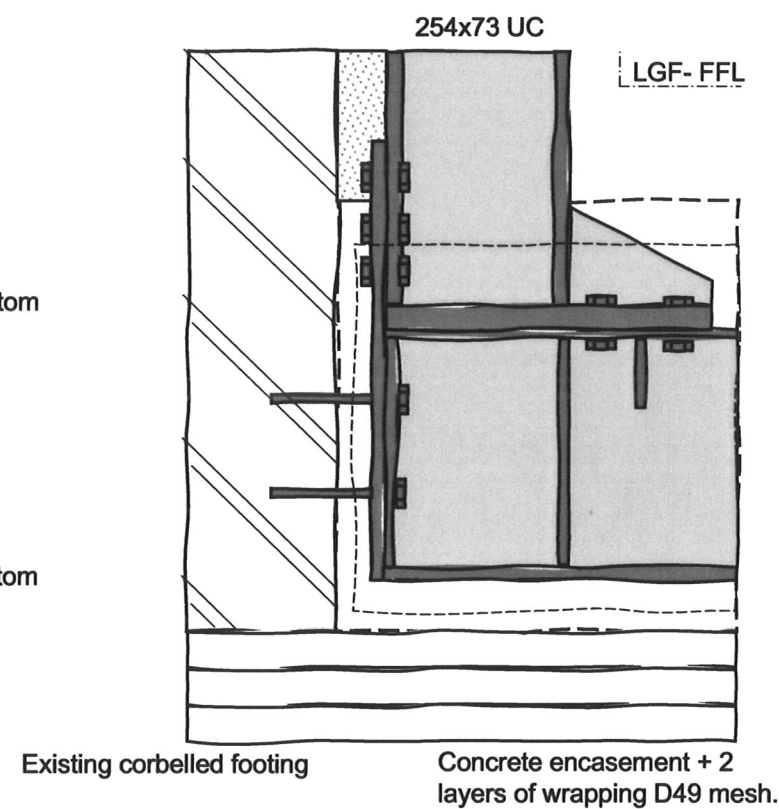


ELEVATION

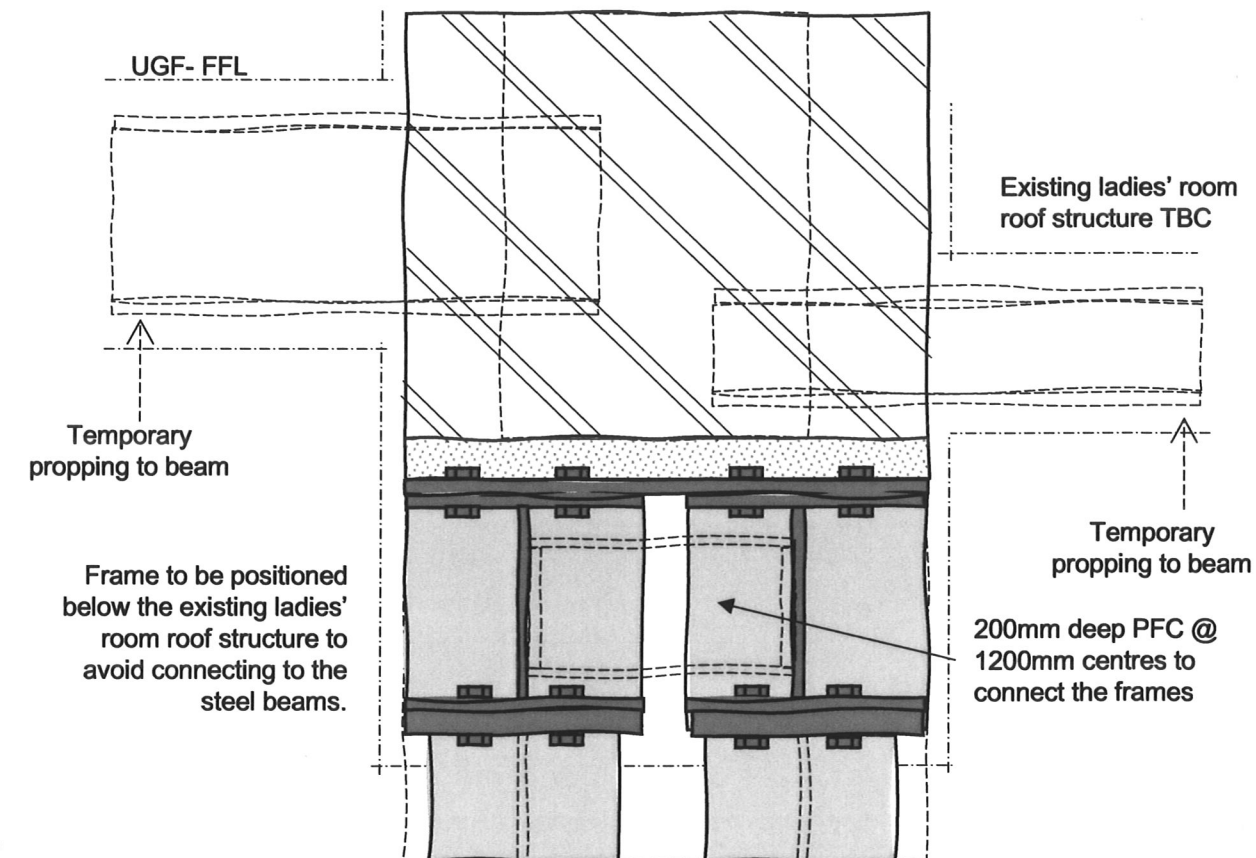
If frame is to be positioned within piers then temporary works will be more complicated and more expensive.



DETAIL 1



DETAIL 2



DETAIL 3

- Notes
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A	07.23	MC	RD	FORMATTING
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Job Title Warwick Mill, Middleton, M24 1AZ		
Drawing Title Bike Storage Frame		
Job No./Drg No. 21008 / SK15	Revision A	Scale © A3 NTS