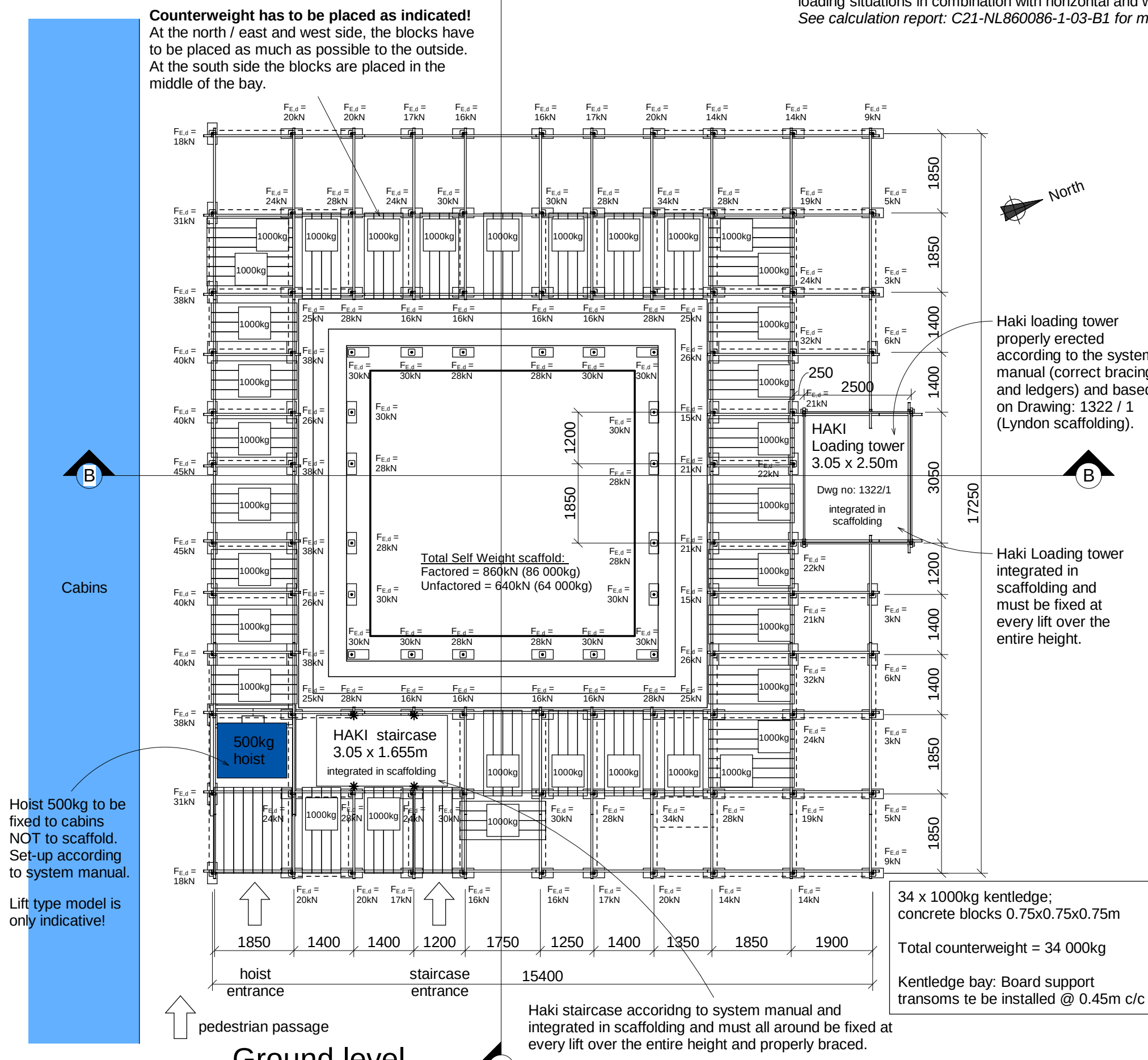




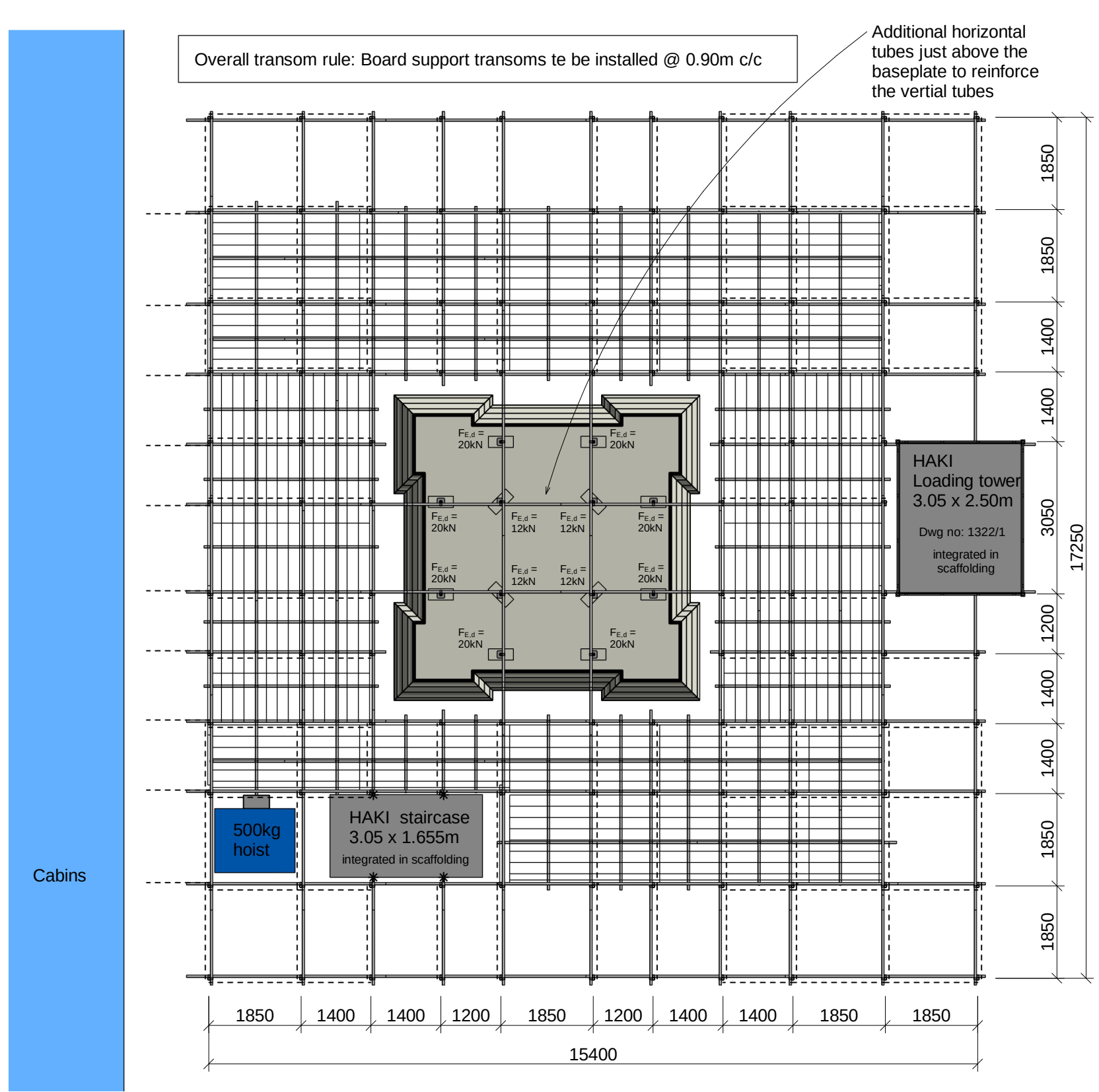
Attention! During erection, always ensure that all scaffolding components are at least 100mm from Memorial elements, to prevent possible damage caused by global movements.

Counterweight has to be placed as indicated! At the north / east and west side, the blocks have to be placed as much as possible to the outside. At the south side the blocks are placed in the middle of the bay.

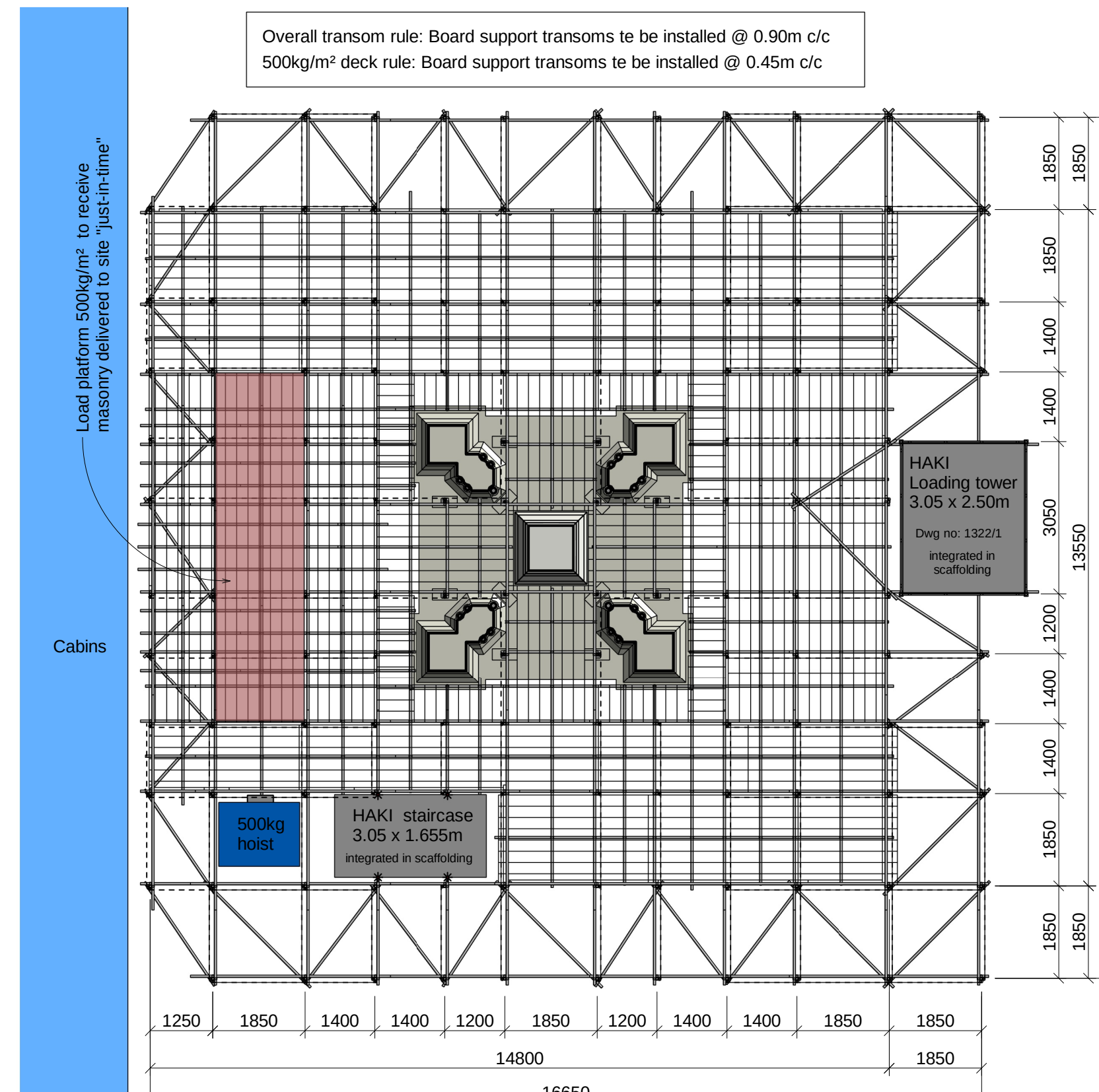
Indicated $F_{L,R}$ values are maximum **factored** (Ultimate limit state; FOS = 1.35 - 1.50) reactions, and **do not occur simultaneously!** These are based on different vertical loading situations in combination with horizontal and wind loads! See calculation report: C21-NL80086-1-03rev0 for more information.



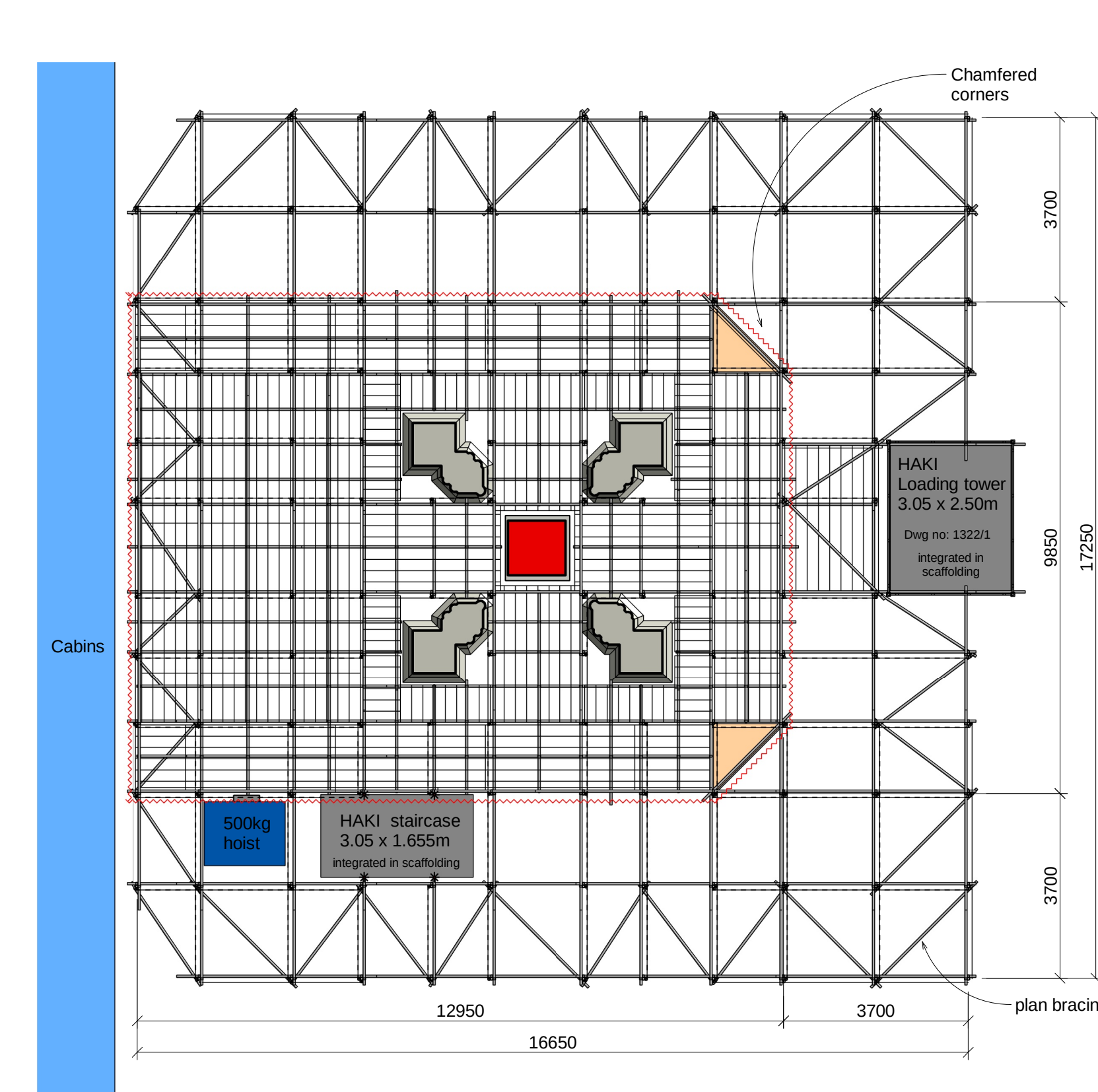
Ground level



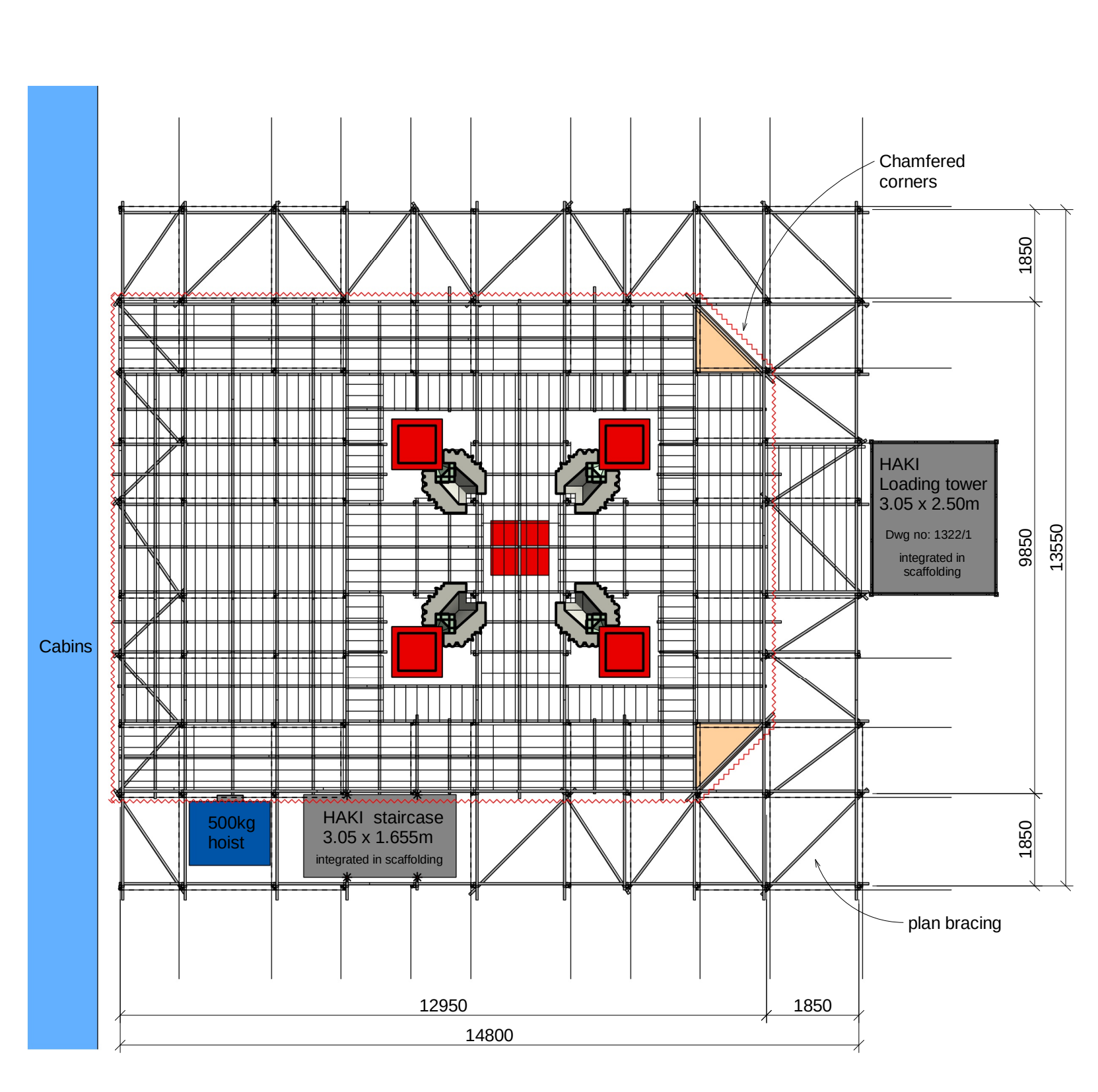
Level 1



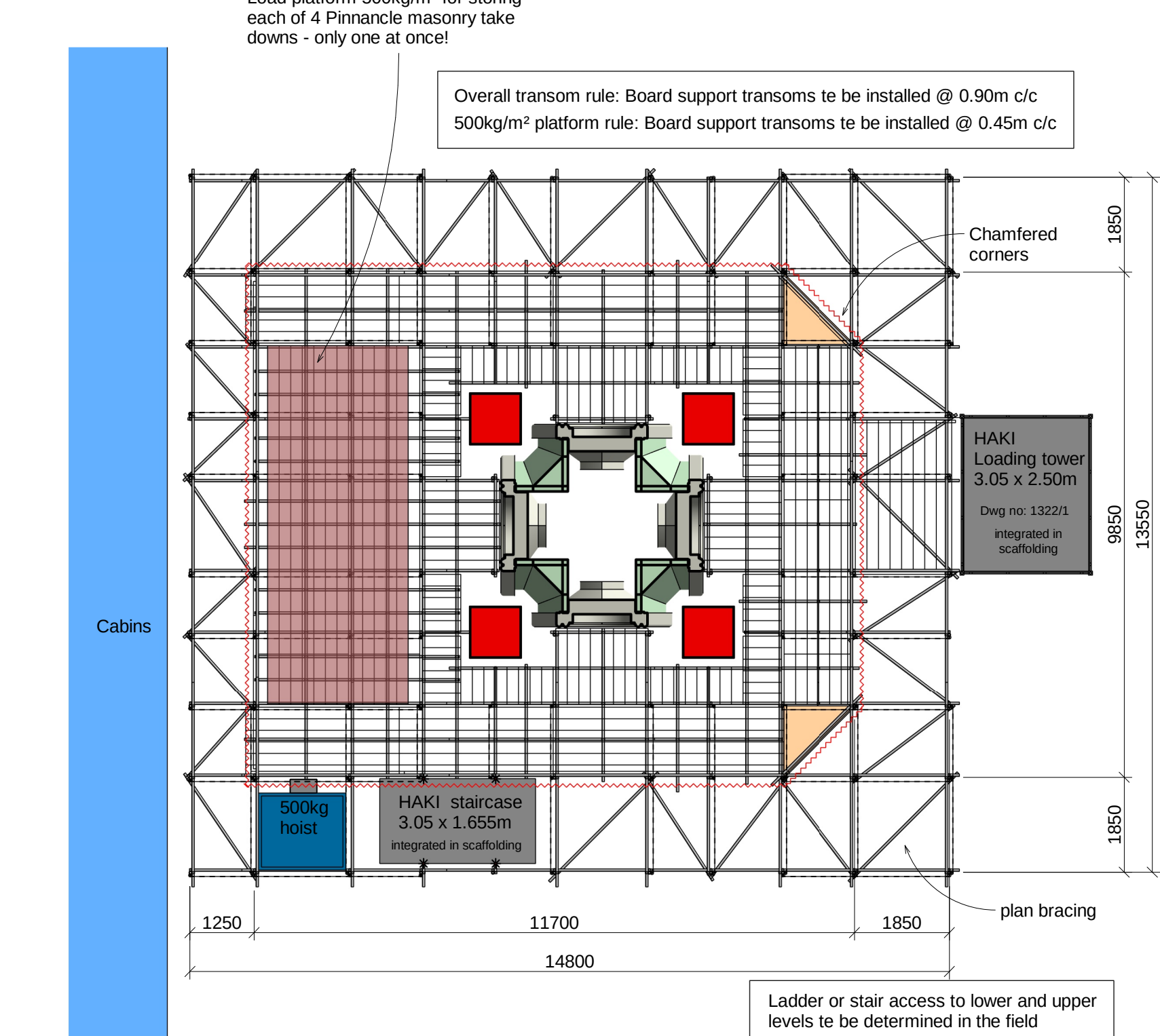
Level 2



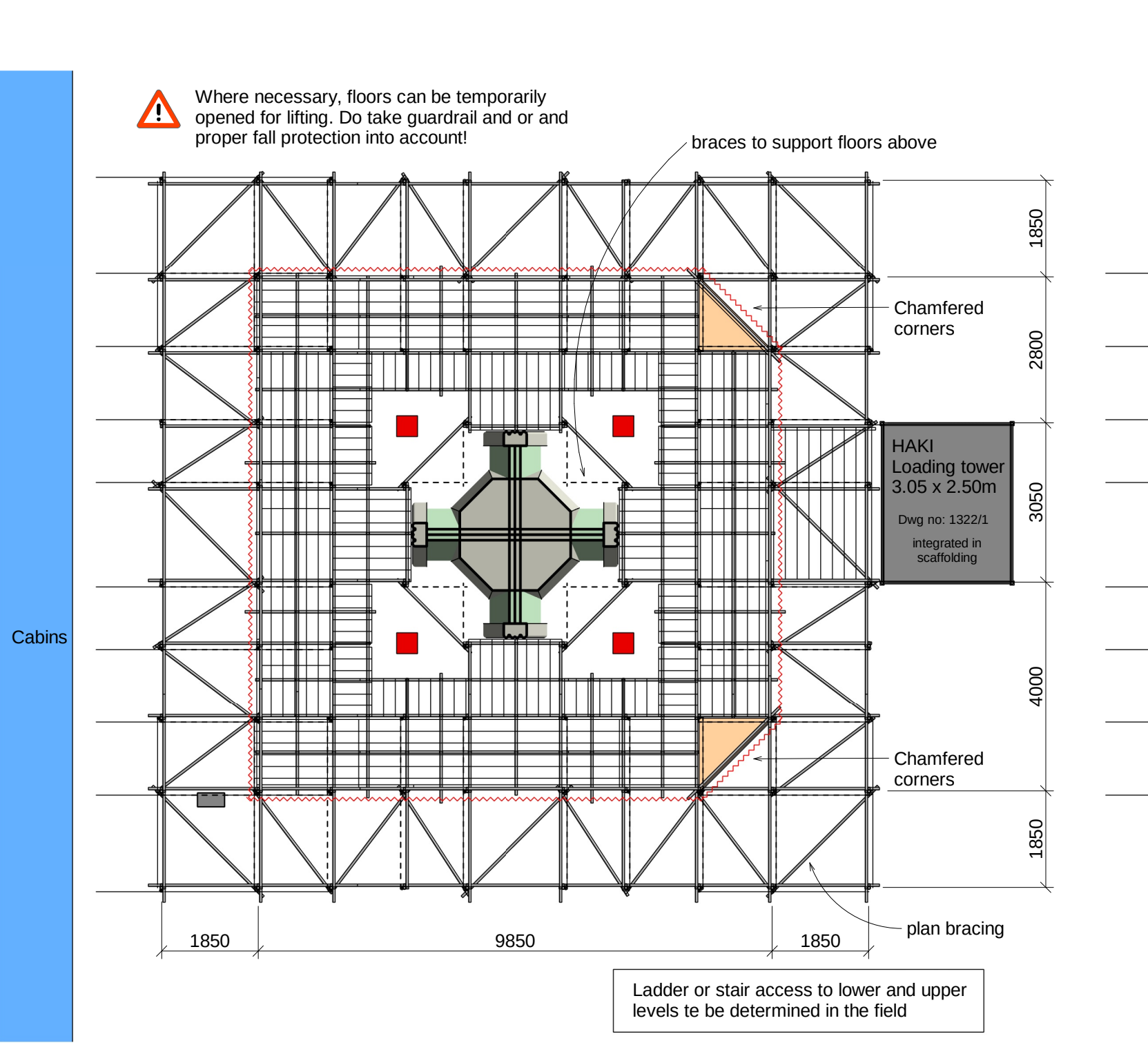
Level 3



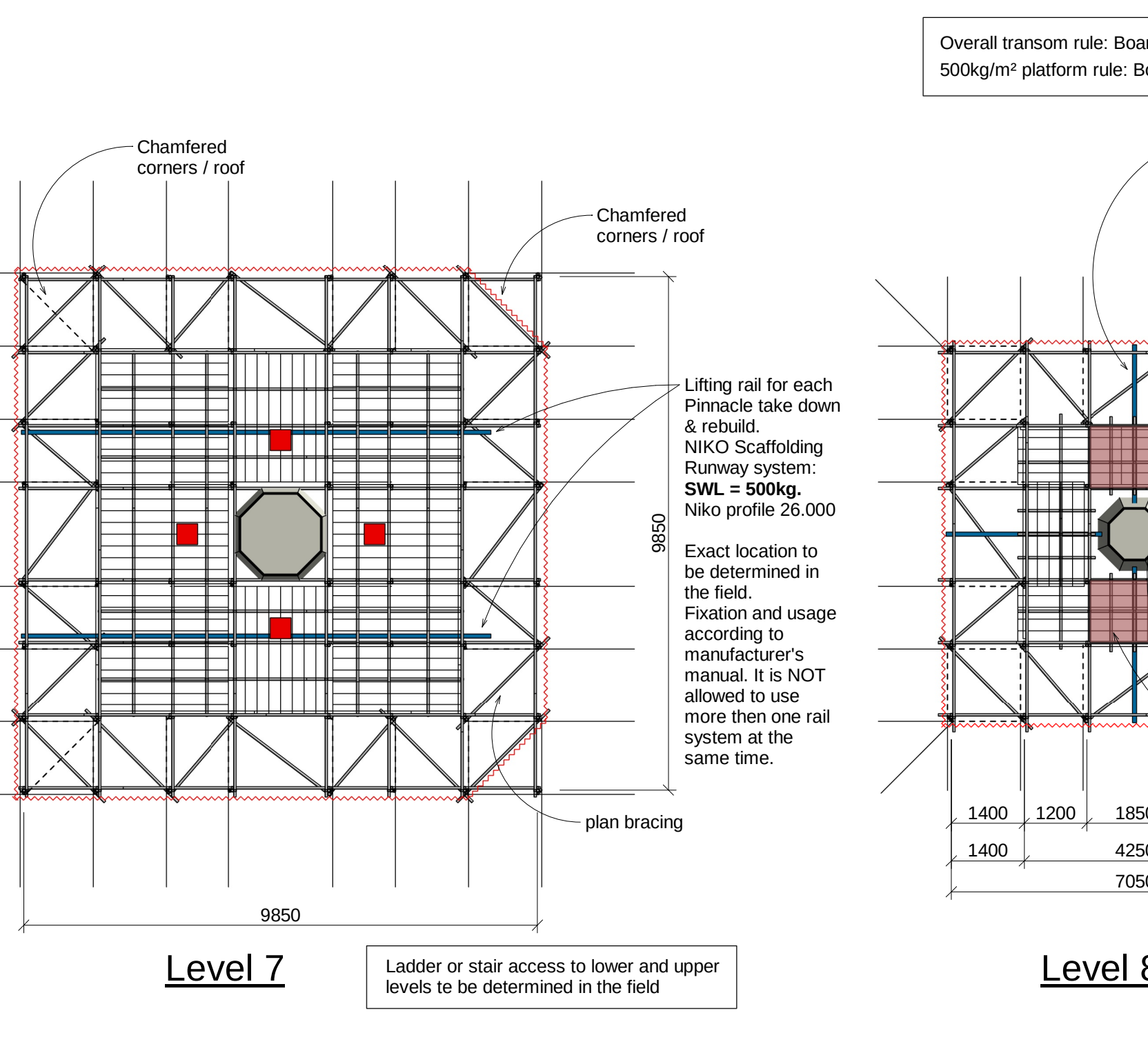
Level 4



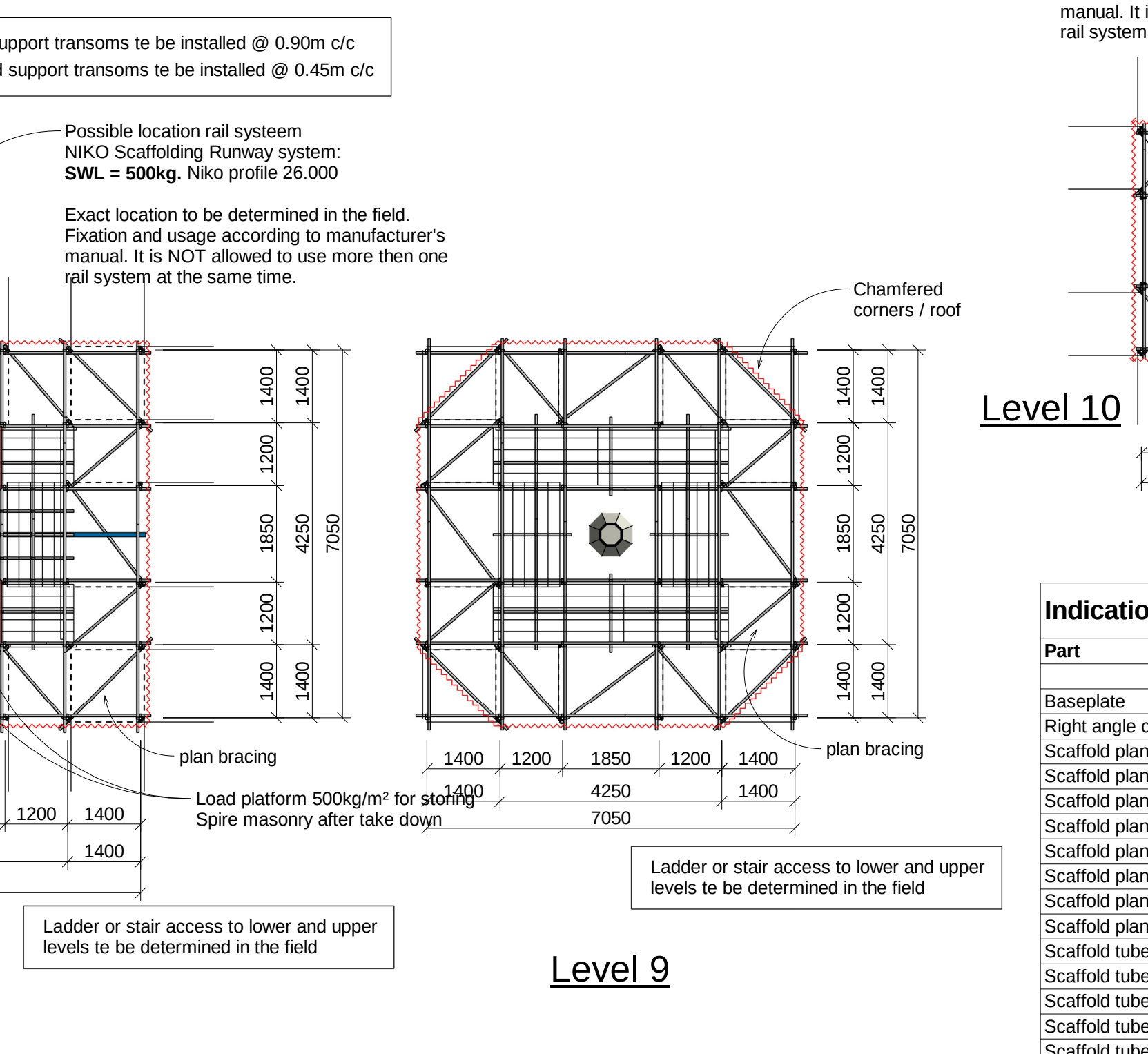
Level 5



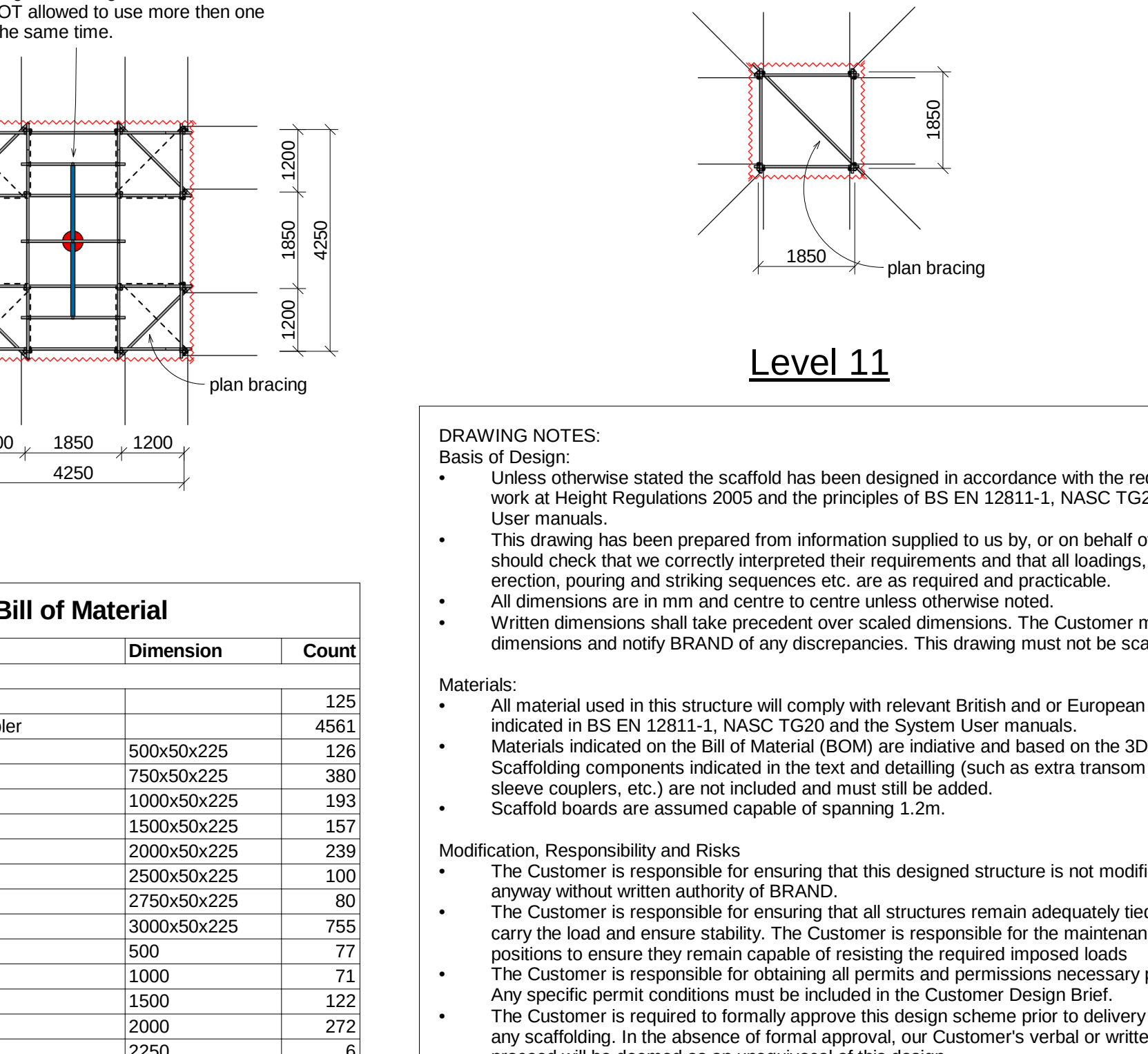
Level 6



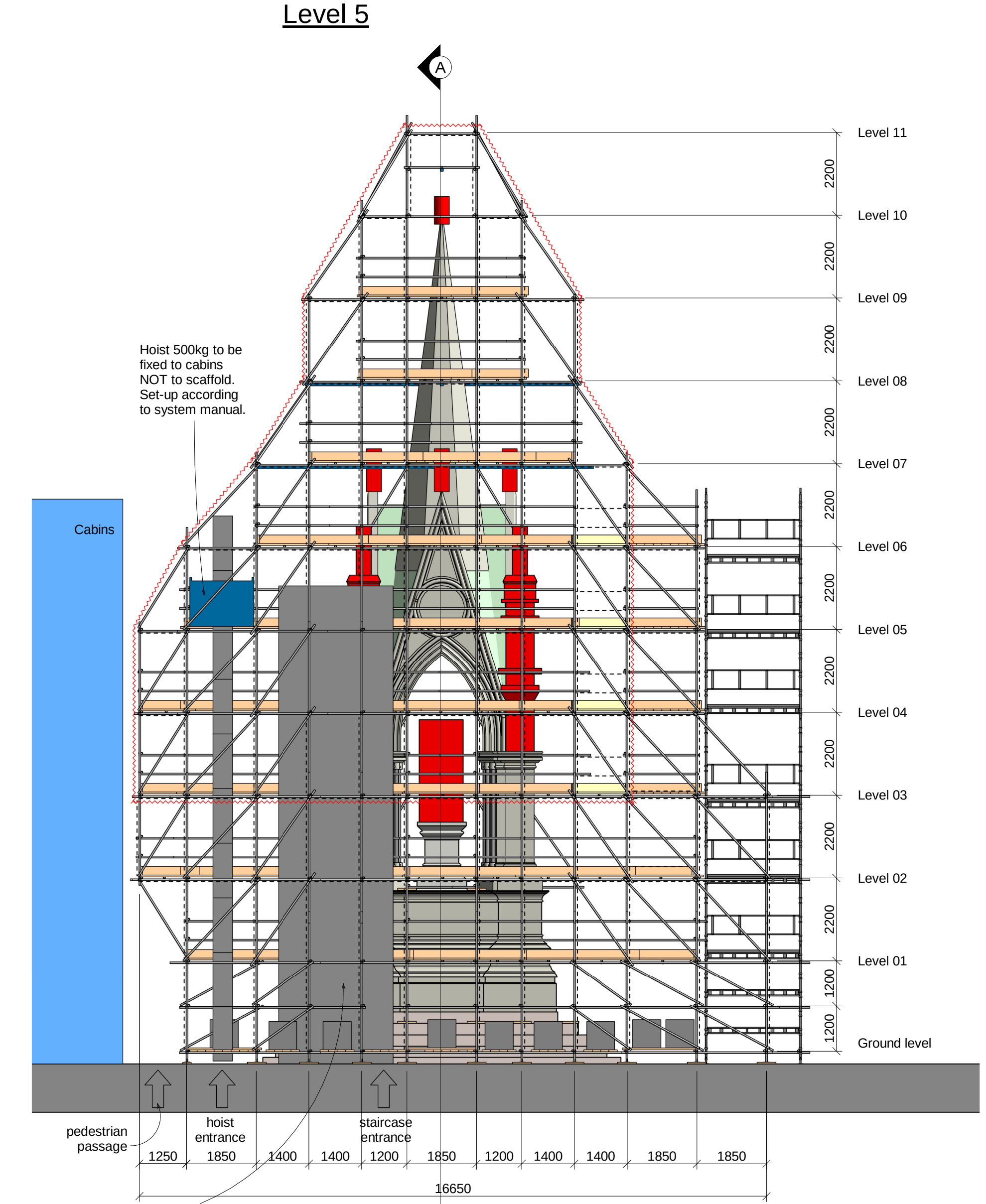
Level 7



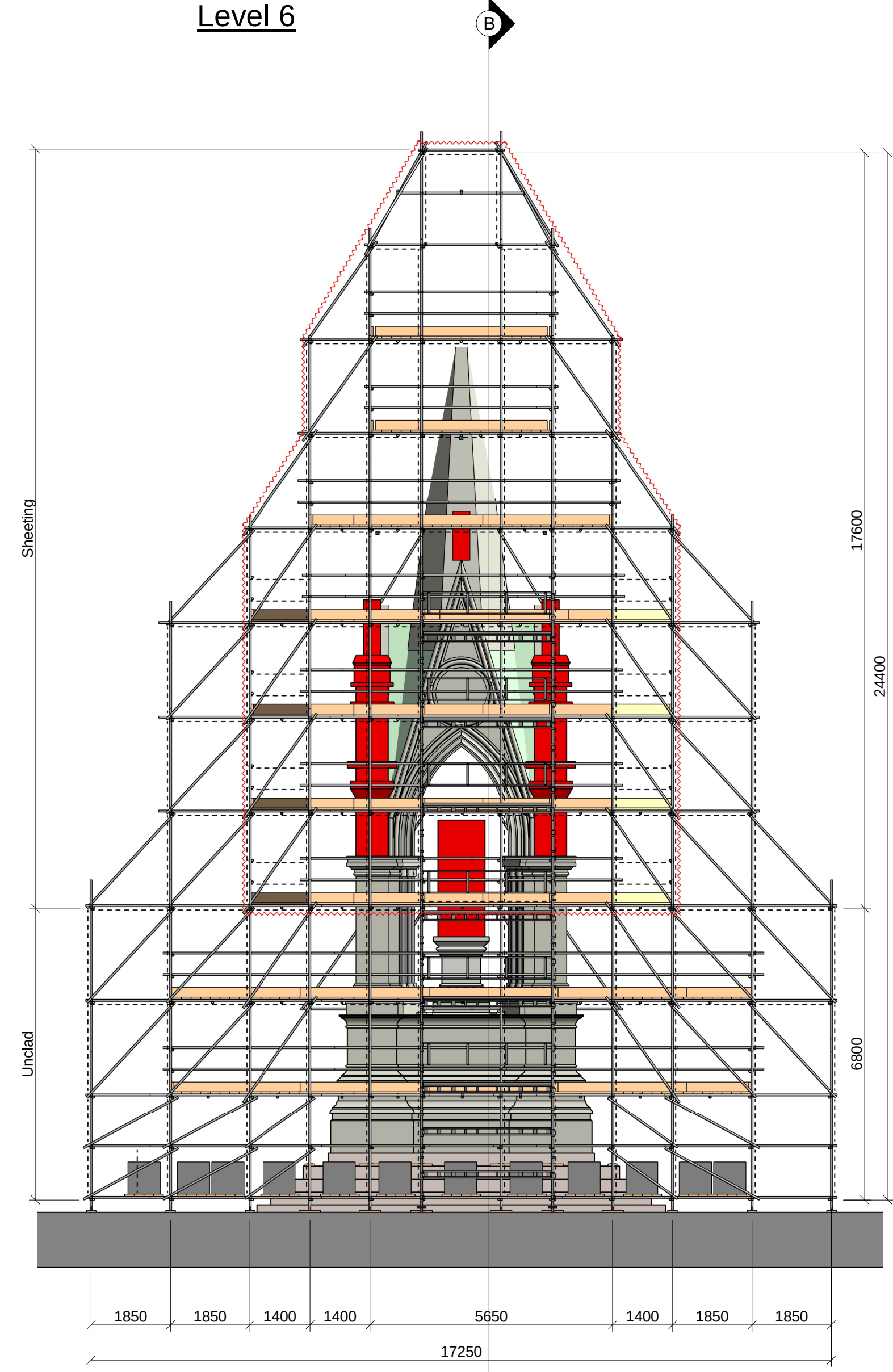
Level 8



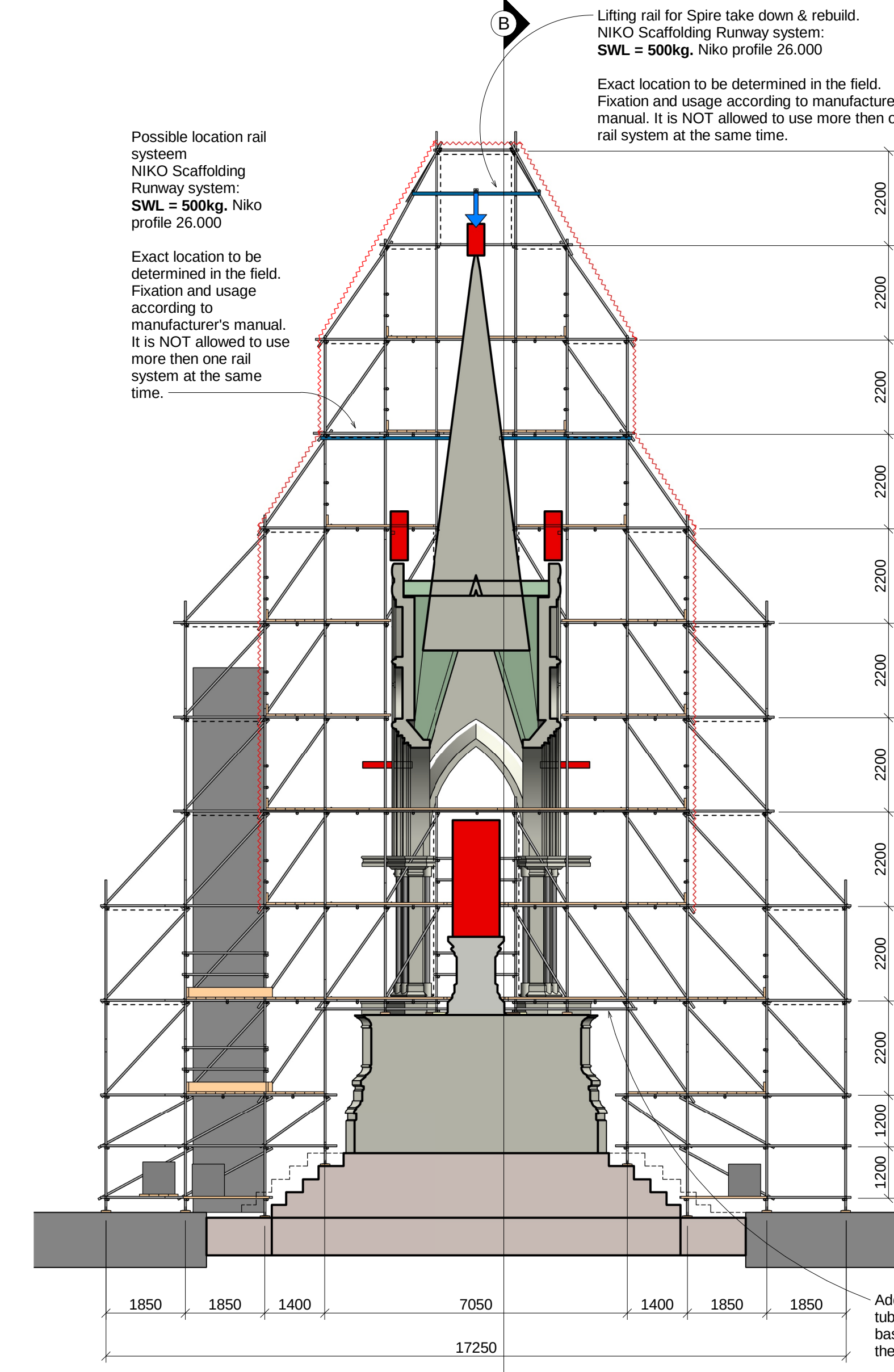
Level 9



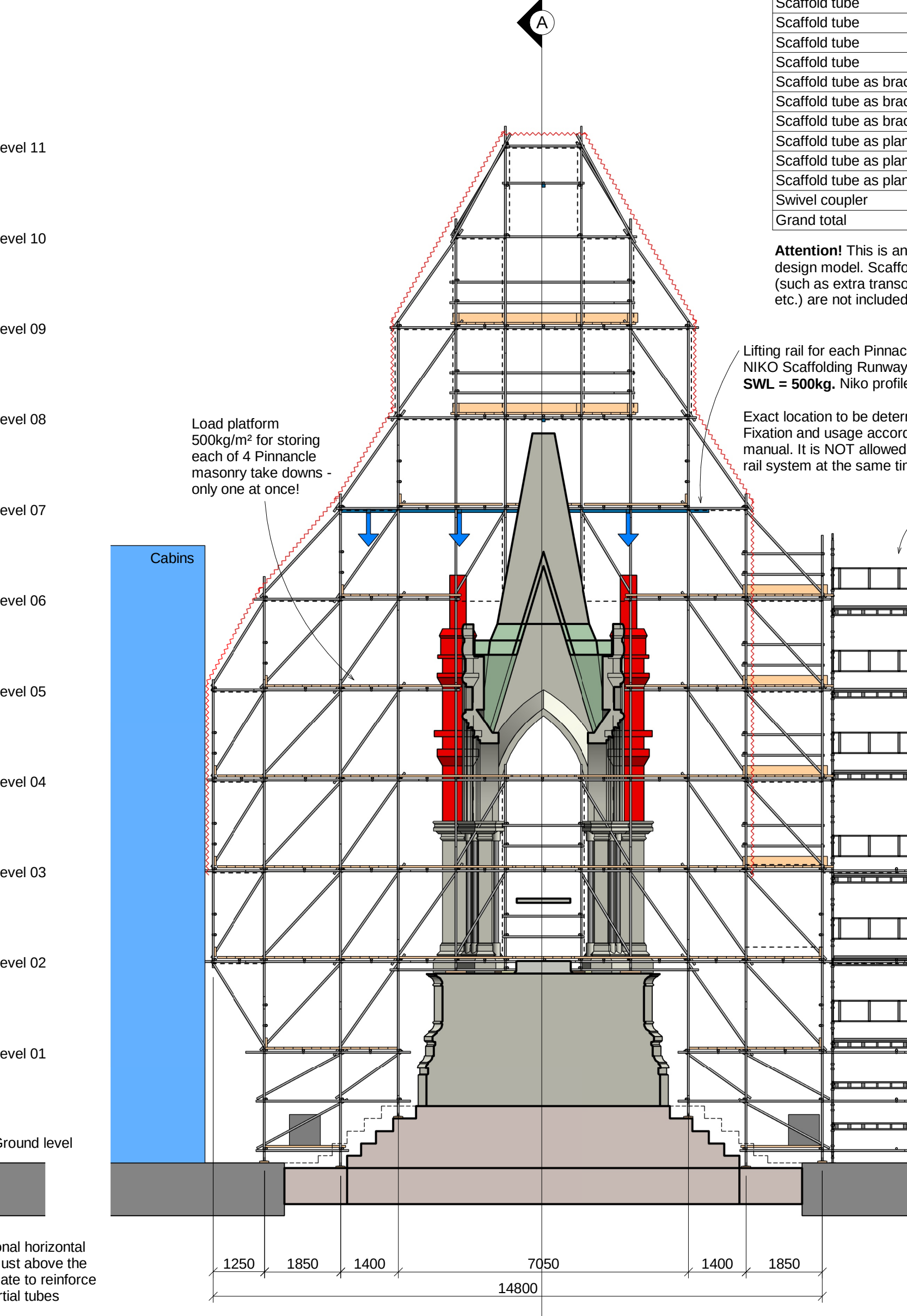
East



North



Section A



Section B

Lifting rail for Spire take down & rebuild. NIKO Scaffolding Runway system. SWL = 500kg, Niko profile 26.000

Exact location to be determined in the field. Fixation and usage according to manufacturer's manual. It is NOT allowed to use more than one rail system at the same time.

Level 10

Level 11

Indication Bill of Material

Part	Dimension	Count
Baseplate		125
Right angle coupler		4561
Scaffold plank	500x50x225	126
Scaffold plank	750x50x225	380
Scaffold plank	1000x50x225	193
Scaffold plank	1500x50x225	157
Scaffold plank	2000x50x225	239
Scaffold plank	2500x50x225	100
Scaffold plank	2750x50x225	80
Scaffold plank	3000x50x225	755
Scaffold tube	500	77
Scaffold tube	1000	71
Scaffold tube	1500	122
Scaffold tube	2000	272
Scaffold tube	2250	6
Scaffold tube	2500	98
Scaffold tube	3000	90
Scaffold tube	3500	75
Scaffold tube	3750	16
Scaffold tube	4000	1254
Scaffold tube as brace	2000	69
Scaffold tube as brace	2500	198
Scaffold tube as brace	3000	657
Scaffold tube as plan brace	2000	56
Scaffold tube as plan brace	2500	154
Scaffold tube as plan brace	3000	43
Swivel coupler		1832
Grand total		11806

Attention! This is an indicative Bill of Material, based on the design model. Scaffolding components indicated in the text (such as extra transom tubes & fittings, sleeve couplers, etc.) are not included and must still be added.

Lifting rail for each Pinnacle take down & rebuild. NIKO Scaffolding Runway system. SWL = 500kg, Niko profile 26.000

Exact location to be determined in the field. Fixation and usage according to manufacturer's manual. It is NOT allowed to use more than one rail system at the same time.

Haki loading tower properly erected according to the system manual (correct bracing and ledgers) and based on Drawing 1322 / 1 (Lyndon scaffolding).

Haki Loading tower integrated in scaffolding and must be fixed at every lift over the entire height.

DRAWING NOTES:
Basis of Design:
• Unless otherwise stated the scaffold has been designed in accordance with the requirements of The work at Height Regulations 2005 and the principles of BS EN 12811-1, NASC TG20 and the System User manuals.
• This drawing has been prepared from information supplied to us by, or on behalf of the Customer, who should check that we correctly interpreted their requirements and that all loadings, dimensions, details, erection, pouring and striking sequences etc. are as required and practicable.
• All dimensions are in mm and centre to centre unless otherwise noted.
• Written dimensions shall take precedent over scaled dimensions. The Customer must verify all site dimensions and notify BRAND of any discrepancies. This drawing must not be scaled.

Materials:
• All material used in this structure will comply with relevant British and / or European Standards as indicated in BS EN 12811-1, NASC TG20 and the System User manuals.
• Materials indicated on the Bill of Material (BOM) are indicative and based on the 3D design model. Scaffolding components indicated in the text and detailing (such as extra transom tubes & fittings, sleeve couplers, etc.) are not included and must still be added.
• Scaffold boards are assumed capable of spanning 1.2m.

Modification, Responsibility and Risks
• The Customer is responsible for ensuring that this designed structure is not modified or altered in anyway without written authority of BRAND.
• The Customer is responsible for ensuring that all structures remain adequately tied and/or braced to carry the load and ensure stability. The Customer is responsible for the maintenance of all tie and butt positions to ensure they remain capable of resisting the required imposed loads.
• The Customer is responsible for obtaining all permits and permissions necessary prior to construction. Any specific permit conditions must be included in the Customer Design Brief.
• The Customer is required to formally approve this design scheme prior to delivery and/or erection of any scaffolding. In the absence of formal approval, our Customer's verbal or written instruction to proceed will be deemed as an unequivocal of this design.
• The erection and dismantling of this scheme will be in accordance with a safe system of work as detailed in our Operational Risk Assessment and Method Statement.
• The scaffold will be erected and dismantled in accordance with guidance issued by NASC i.e. TG20 etc

TECHNICAL INFORMATION:
• Used scaffold system: Tube - fitting, in compliance with TG20.
• Attention! During erection, always ensure that all scaffolding components are at least 100mm from Memorial elements, to prevent possible damage caused by global movements.
• Floor decking: Timber 38mm.
• Overall transom rule: Board support transoms to be installed @ 0.90m c/c.
• 500kg/m² deck rule: Board support transoms to be installed @ 0.45m c/c.
• Kentledge bay: Board support transoms to be installed @ 0.45m c/c.
• Scaffold is partly sheeted, using chamfered corners and roofs.

Allowable working load = 300 kg/m² (class 4). Max. 1 level is loaded.
Allowable loading deck load = 500 kg/m². Max 1 deck is loaded.
Allowable lift load = 500kg. Max 1 lift at the time is used.
For wind loads, Vel pressure = 0.72kN/m² (at H = 24).
V_{0,10m} = 22.5m/s, T_w = 1.00, T_{0,10m} = 5.2m, 100m distance to sea upwind.
Max. calculated standard load $F_{L,R}$ = 45.8kN (F_{leg} = 31.7kN).
Total Self weight scaffold (Serviceability limit state) = 64 000kg.
Total weight kentledge (Serviceability limit state) = 34 concrete blocks x 1000kg = 34000kg

Key
----- Bracing
----- Cladding

For DRAWING NOTES, see drawing OTH-BEI-EE-ES-DWG-X-0207

This construction is uploaded to Autodesk A360. Scan the QR-code to view this construction in 3D. QR-code link:
<https://a360.co/2QV8M7>

After assembly, it is required to send the completed inspection form to the Engineering Department

This drawing is valid until: 2 years after the last drawing date

Accompanying project report: C21-NL80086-1-03rev0 Difficulty level: 3

Deviations, ambiguities and/or changes to be reported to the Engineering Department

This drawing is based on the information given by the client and based on exceptional use of BRAND accessories or by BRAND delivered accessories.

The client must verify the capacity of the foundation and adjacent structures to bear the calculated loads.

Revision: C01 First issue

Revision:

Revision:

Revision:

Client: Lendlease

Project: Manchester Town Hall - Albert Memorial

Per: Overview Freestanding access scaffold

By BRAND/SAFWAY

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Scale: 1:100 Size: A0

Drawing no.: OTH-BEI-EE-ES-DWG-X-0207

CHECKED BY BEIS-ENGINEERING

CONSTRUCTION DRAWING

Rev: C01 Drawing status: A