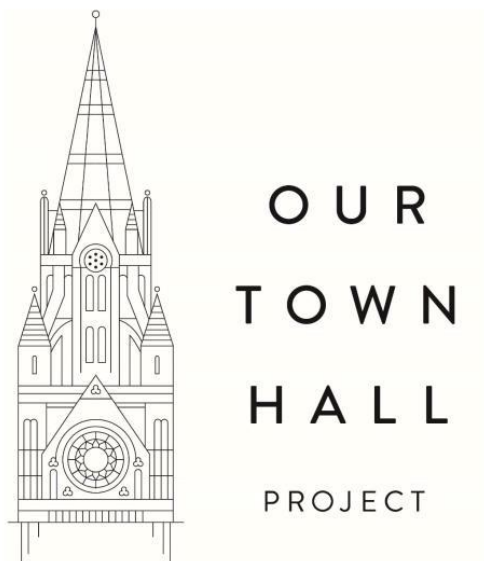




Title:

Technical Submission Form – Albert Memorial

OTH-BEI-EE-ES-TSB-X-0217

Status: **S3 – For Review and Comment**

Rev: **P01**

Document Type: **Technical Submission**

Date: **04/08/2021**

Issue History:

Revision Nr	Details	Date	Created By	Check by
P01	First Issue	04/08/2021	NS	



Our Town Hall Works Technical Submission

Works Package Name:

Works Package Number:

Task/Activity: Albert Memorial Scaffold
Erection

Location: External Albert Memorial Statue

Date: 04/08/2021

Start Date of Activity: TBC

Scope/Overview:

Erection/Dismantle of the Albert Square Memorial Statue.

Consideration for the Memorial heritage with regards to telehandler movements for material distribution and loading of kentledge blocks.

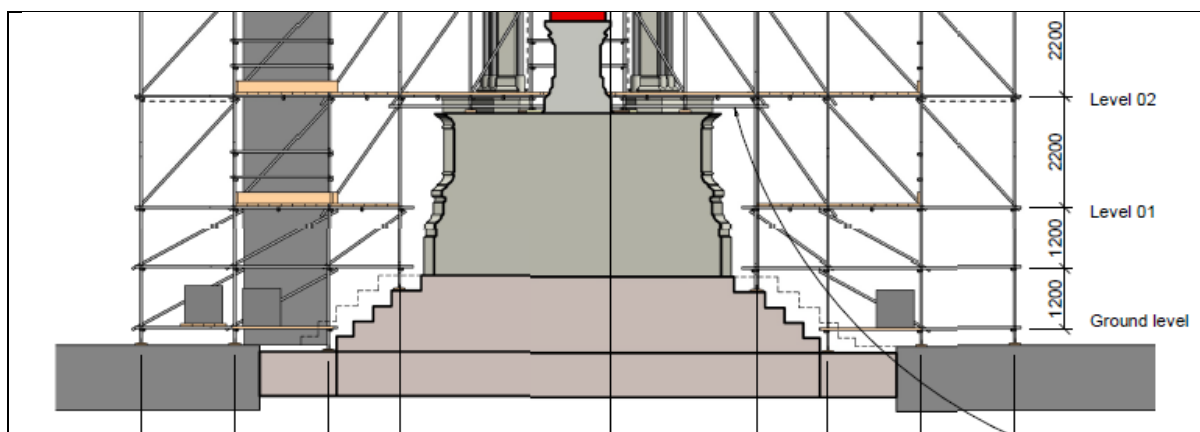
Consideration for the Memorial heritage with regards to stabilising the scaffold against lateral movement.

Consideration for the Memorial heritage with regards to scaffold erection and working in close proximity of the statue.

The end of scaffold tubes will be capped and kept from direct contact with the Memorial with a clear distance of 100mm maintained from any parts/components of the Memorial statue. **The 100mm clearance dimension is taken from advice by Lyndon-SGB design engineers that there will be a maximum movement tolerance of no greater than 35mm at the half way point up the monument to 95mm at the very top point of the monument.**

Sequence (Incl. hold/inspection points):

Material Distribution routes

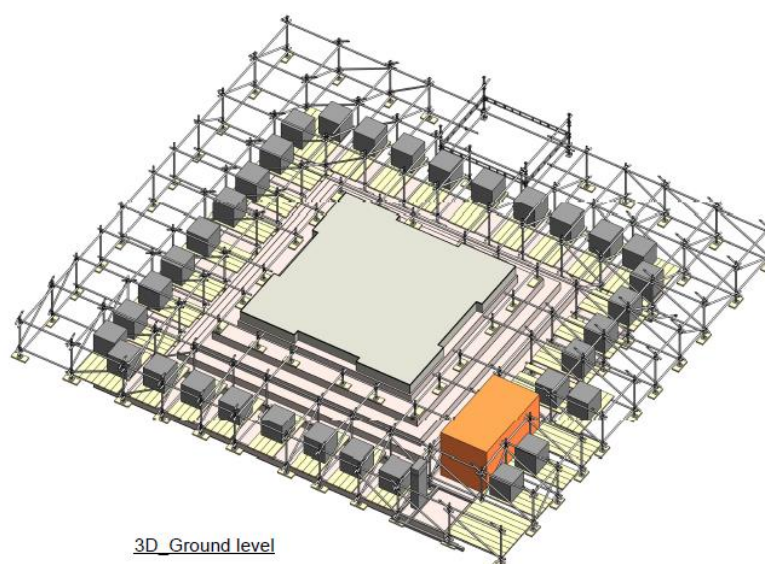


HOLD POINT – Before any scaffold works are undertaken assessments will be made of the existing electrical components currently within the structure. Should any of these impede the erection of the scaffold design then these locations will be highlighted to Lendlease so access can be gained to remove the constraint.

- i. Before any works commence in this location an enhanced toolbox talk will be carried out at the work face to re-iterate the importance of protecting the monument from damage and taking additional care when working within close proximity of the structure. Also, before each shift starts during the JSP/Safe Start a discussion between supervision and the operatives will be held to highlight any locations where there could be a risk of close proximity working. These locations will be vigorously monitored by the supervision and works will be ceased if the supervisor feels the operatives aren't taking the additional care that's required. The safe start/tool box talk will be re-iterated again at this point before the supervisor allows works to commence. This level of supervision and care will be maintained for the full duration of works to the albert square monument.

HOLD POINT – DURING ERECTION OF THE ALBERT MEMORAIL SCAFFOLD, OPERATIVES ARE TO ENSURE THAT ALL SCAFFOLDING COMPONENTS REMAIN AT LEAST 100MM FROM THE MEMORIAL ELEMENTS, TO PREVENT POSSIBLE DAMAGE CAUSED BY GLOBAL MOVEMENTS. ALSO, ALL OPEN-ENDED COMPONENTS WILL BE FITTED WITH TUBE CAPS AT THE END CLOSEST TO THE MONUMENT PRIOR TO INSTALLATION AS AN ADDED PROTECTION PRECAUTION.

- ii. On completion of the base lift of the scaffold kentledge block will be positioned on the scaffold as detailed in the design drawing OTH-BEI-EE-ES-DWG-X-0208-C01-A. **The boards which the kentledge block are to sit on must be supported with transoms spaced no greater than 450mm centres. As per below 3D image**

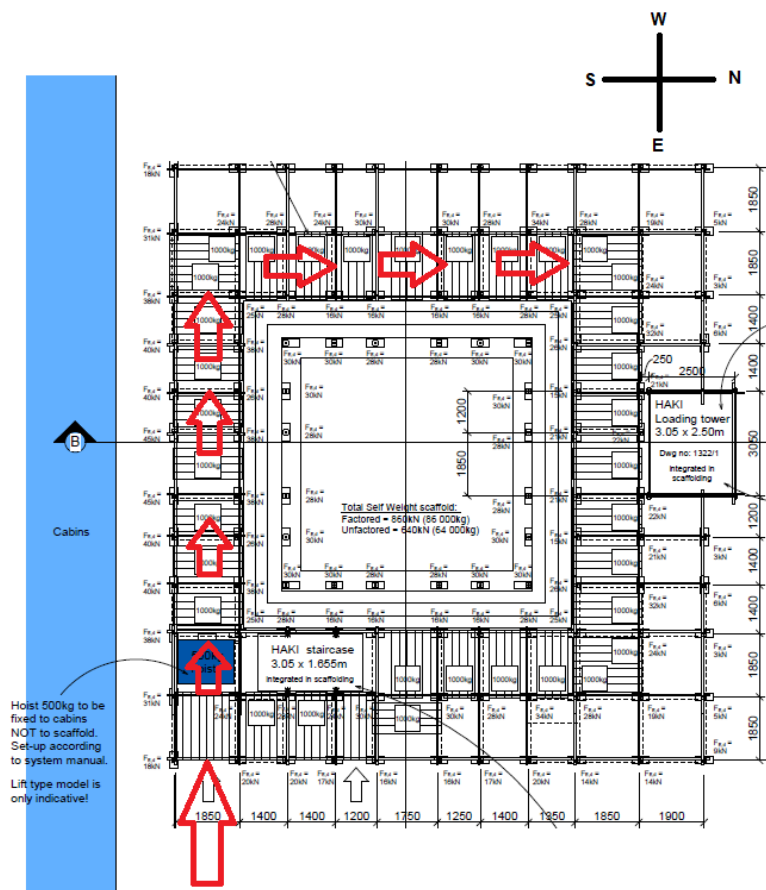


- iii. The telehandler will be utilised to raise the kentledge block onto the scaffold lift. Where the telehandler is unable to position block on the South/West side of the monument, a pallet truck will be used to transport kentledge block along the lift and into position.

Supervision and Banksman will monitor telehandler and scaffold during these operations to ensure clearance from Monument is not breached.

- iv. Where the block is to be placed into position by the pallet truck, the telehandler will first load the block onto a 1000kg graded 4-way wooden pallet, this will be done at the nearest possible location to the blocks final load position. The pallet truck will then transfer the load into its position. See example below.

Loading Location and route for landing South and West Kentledge Block



- v. For ease of movement along the scaffold with the loaded pallet truck, the scaffold boards will be fitted with a plyboard overlay. This will provide a flush and level deck for the blocks to be manoeuvred into position.

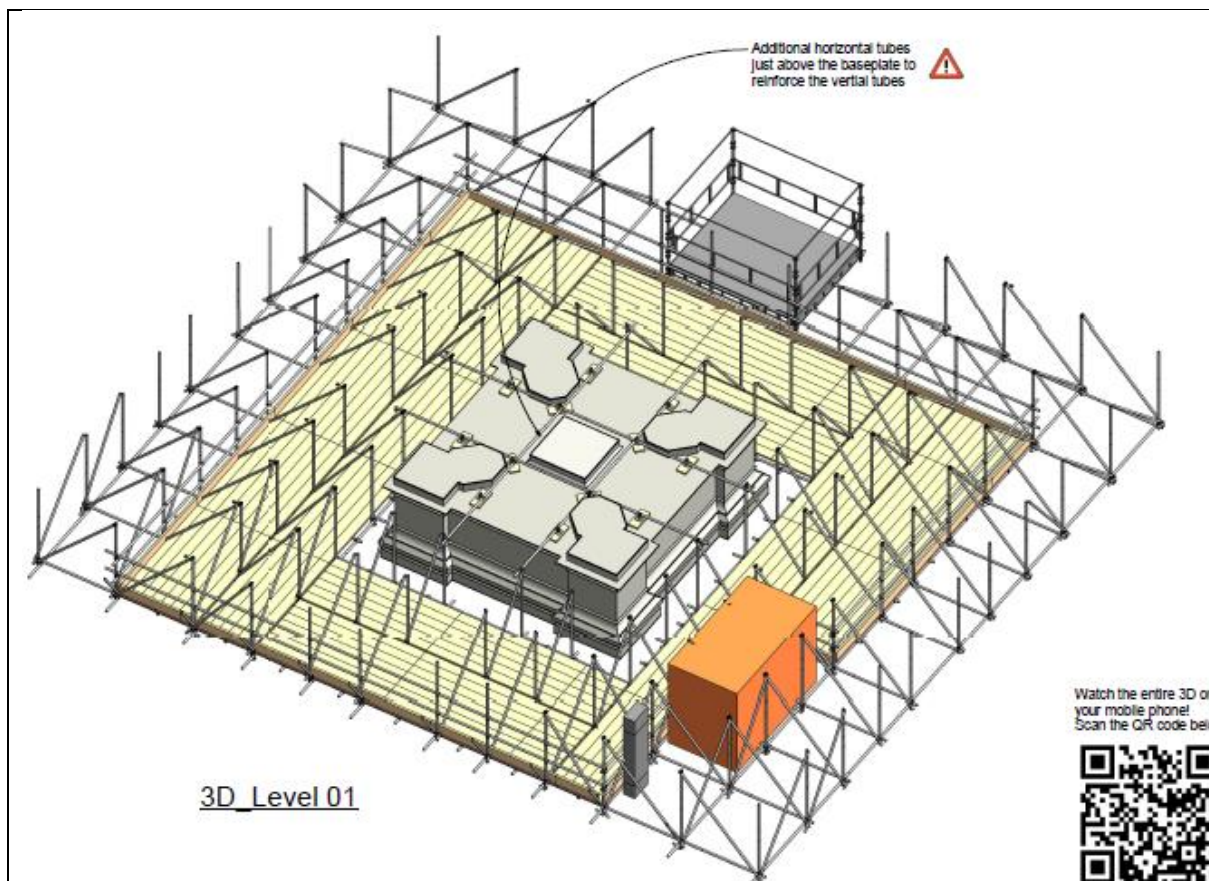
A site mock-up of the ply board base with a kentledge block on the pallet truck showing movement will be carried prior to works commencing to satisfy all parties that the Kentledge block movements will be straightforward.

HOLD POINT – KENTLEDGE BLOCK ON THE NORTH, EAST AND WEST SIDE MUST BE PLACED AS MUCH AS POSSIBLE TO THE OUTSIDE FACE OF THE SCAFFOLD. KENTLEDGE BLOCK ON THE SOUTH SIDE MUST BE PLACED IN THE CENTRE OF EACH BAY

- vi. Once all the kentledge block have been positioned at the base level, the scaffold can be erected to the full height as per the design drawings.

Level 01

This scaffold lift will have minimal close proximity working as were erecting around the base of the monument working up to the height where we will step onto the internal base of the monument. Photos of the monument will be taken at each boarded level prior to erection of the next scaffold lift any existing visible damage will be reported to Lend Lease for inspection prior to continuation.



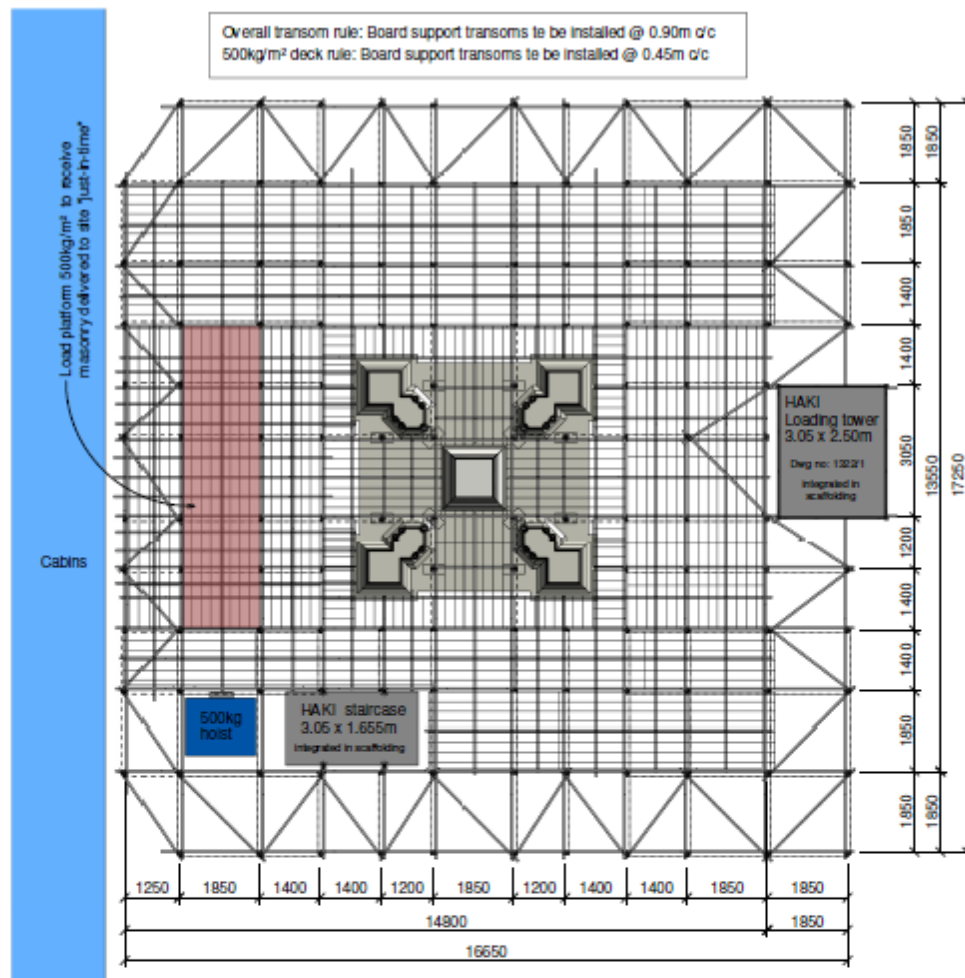
Level 2

This scaffold lift will require us to access onto the internal base of the monument. All scaffold standards will be founded on scaffold board bearing pads which in turn will sit upon a Corex base/rubber mat as an added protection for the monument stone. Located as per drawing locations to ensure 100mm clearance from monument components.

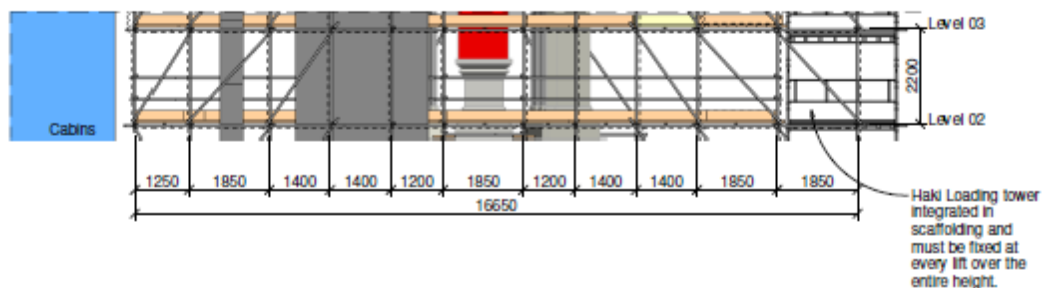
During this section of base out we will ensure drainage gulley's are not blocked or impeded on.

HOLD POINT - Prior to access onto this location lend lease/Purcell will assess the area to determine if any additional protection may be required or any sort of additional measure that will protect the structure

Supervision to monitor working party at close proximity locations vigorously to ensure compliance and ensure protection of the monument is upheld at all times.



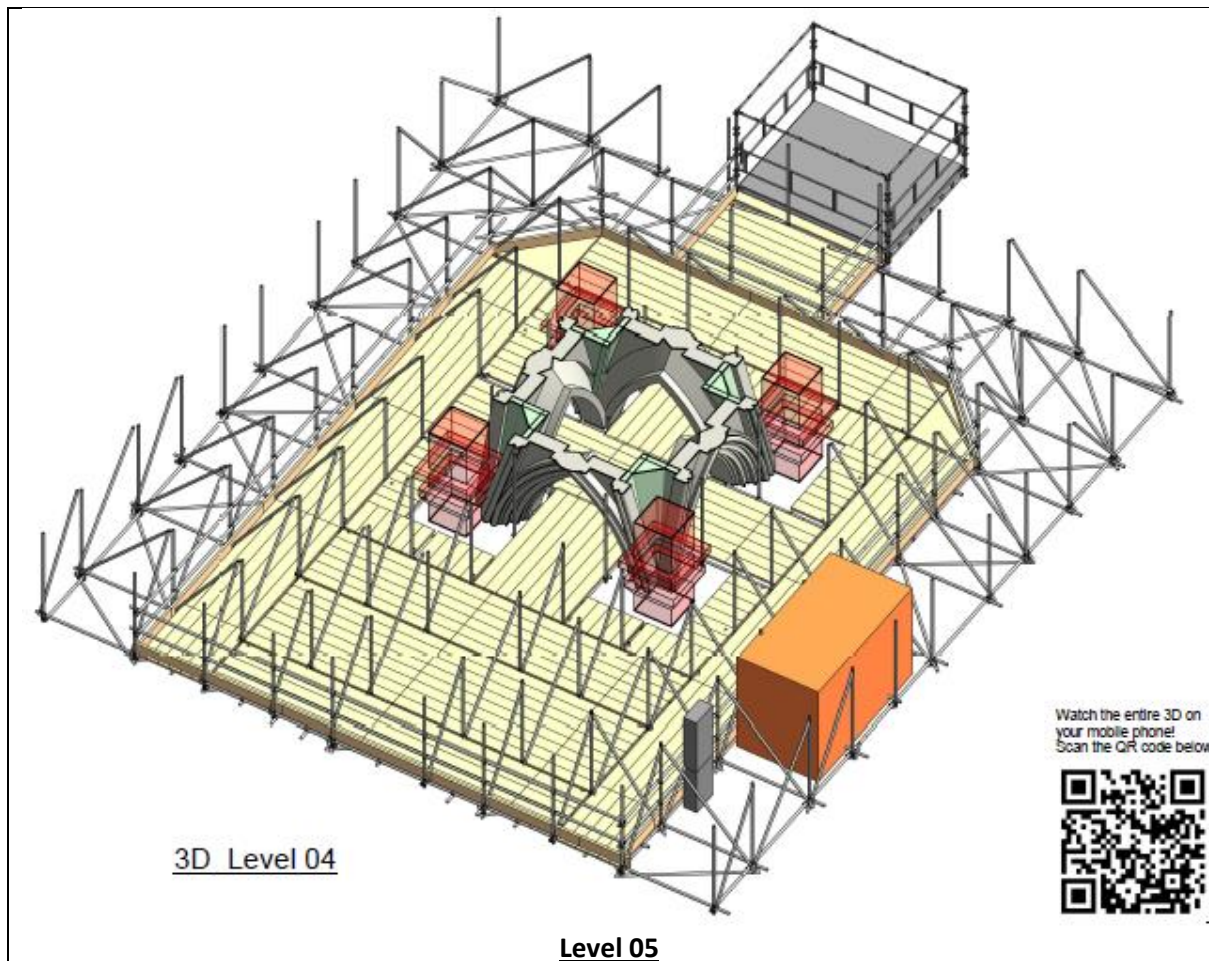
Level 02



East view: level 02 - level 03

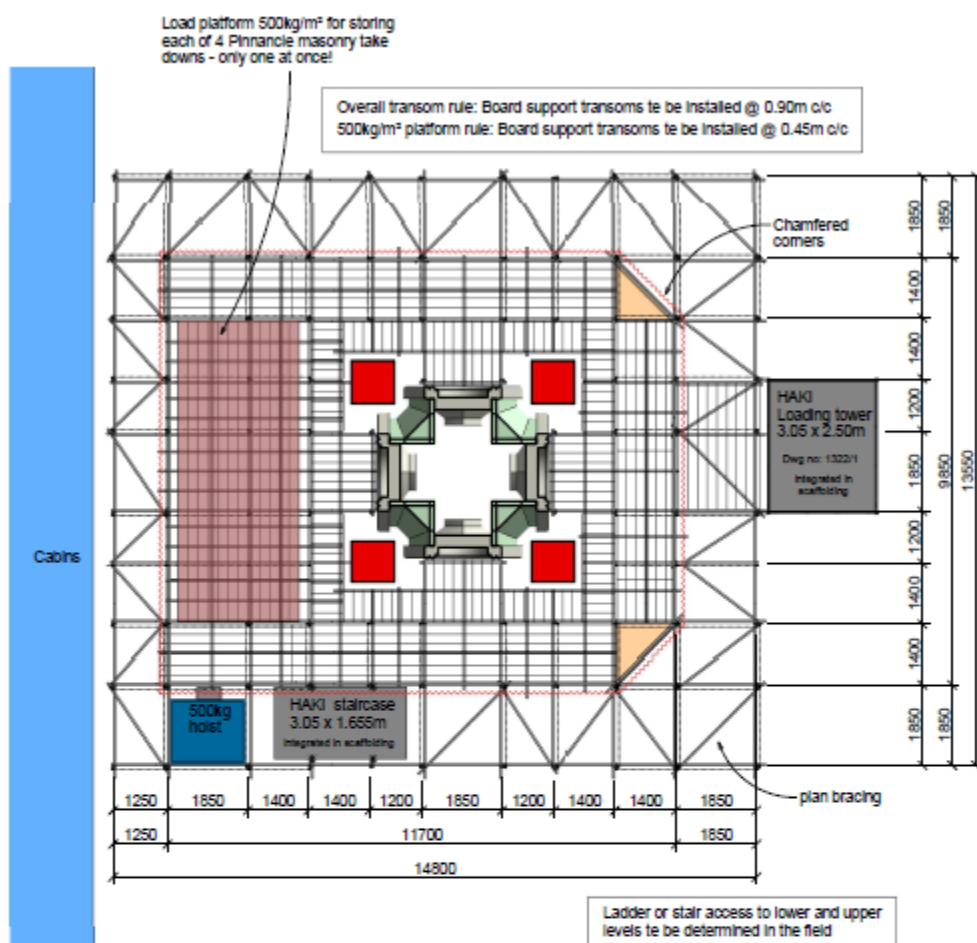
THE SEQUENCING AND HOLD POINTS HIGHLIGHTED EARLIER WILL BE RELEVANT FOR THE FULL ERECTION OF THE MONUMENT AND WILL CONTINUE ON A LIFT BY LIFT BASIS. PLEASE SEE FURTHER LIFT DESIGNS BELOW.

Level 04

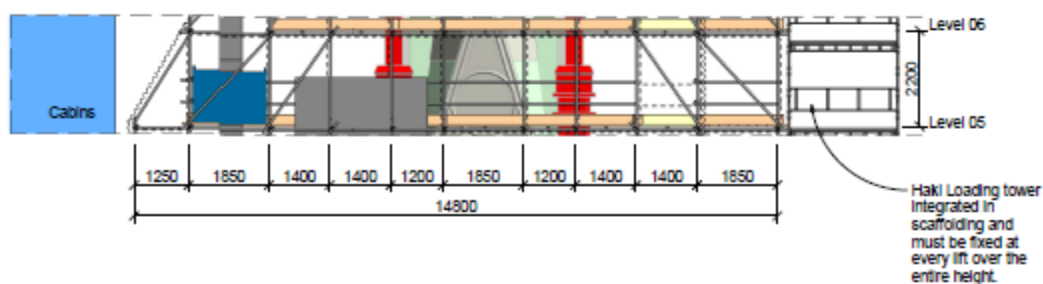




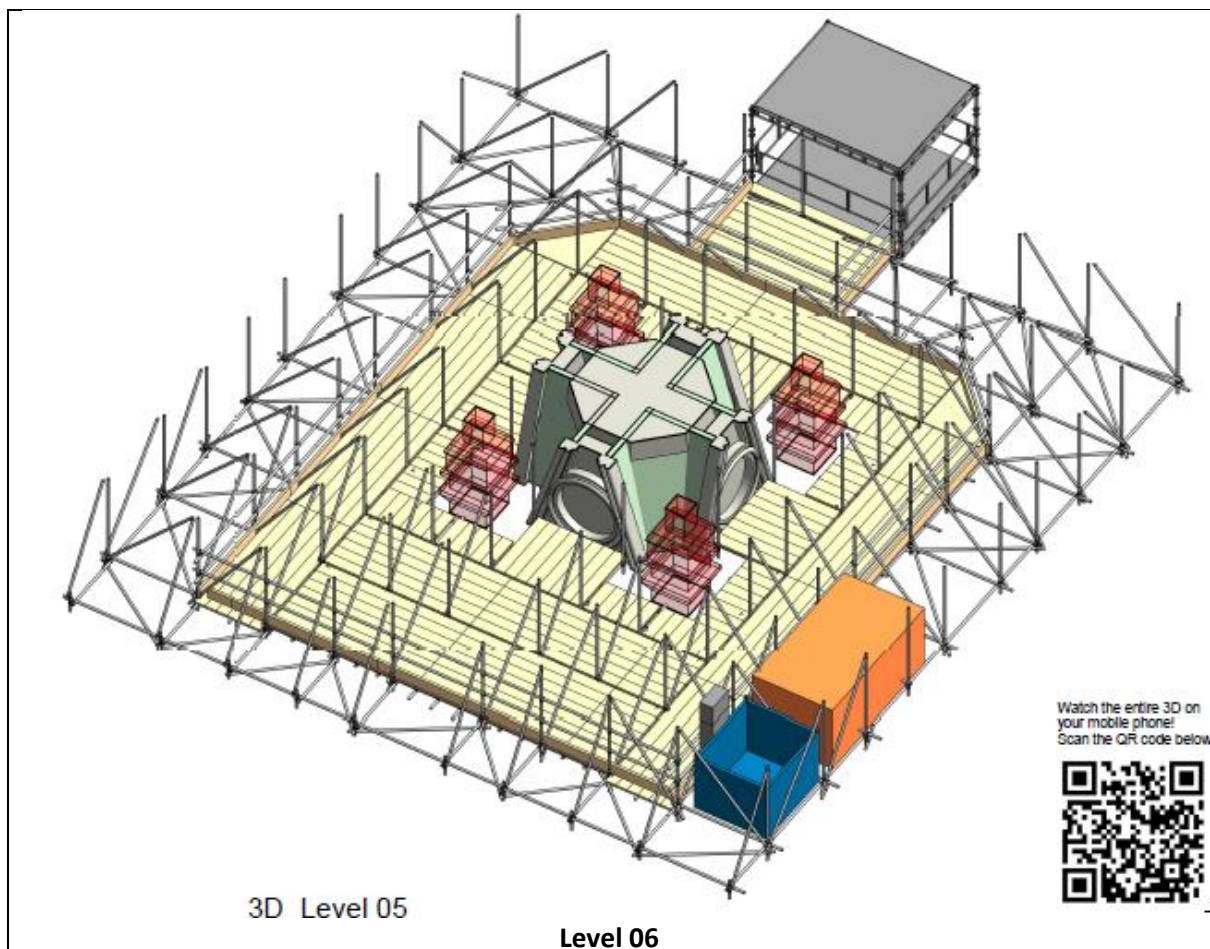
Attention! During erection, always ensure that all scaffolding components are at least 100mm from Memorial elements, to prevent possible damage caused by global movements.

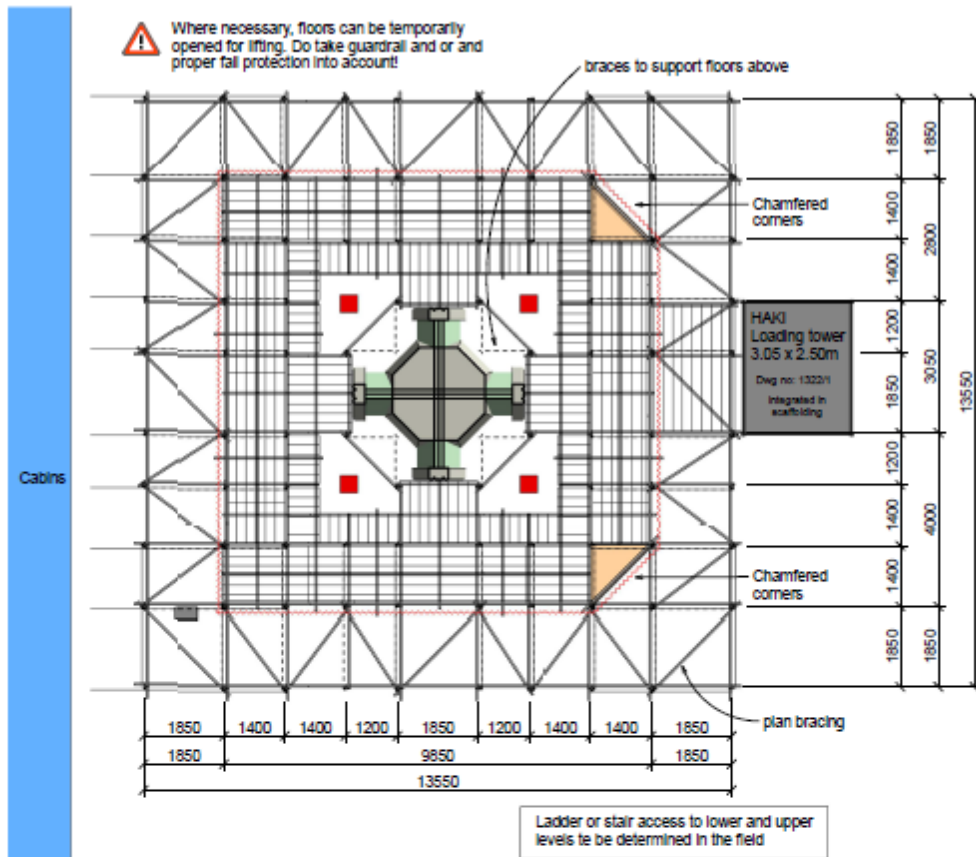


Level 05

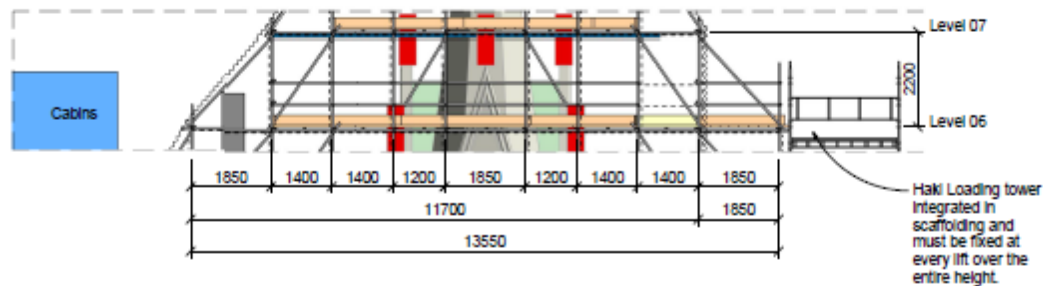


East view: level 05 - level 06

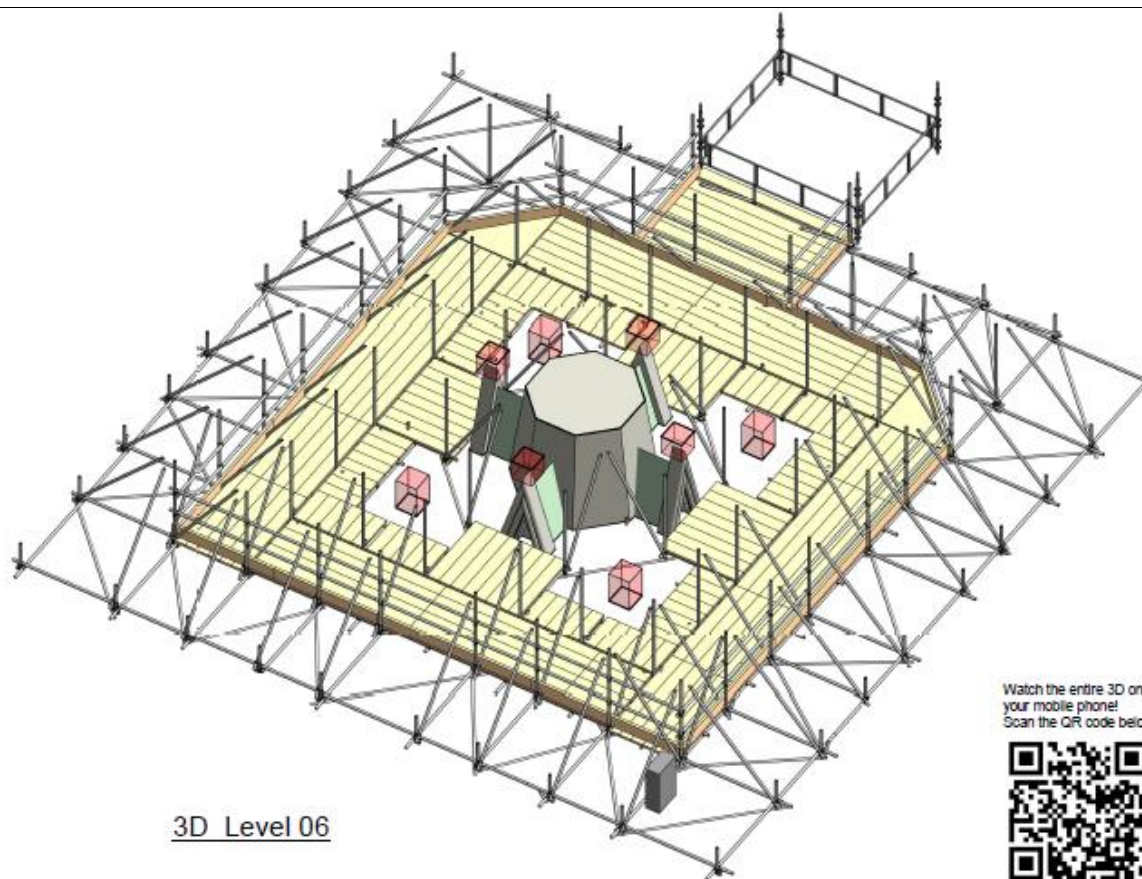




Level 06



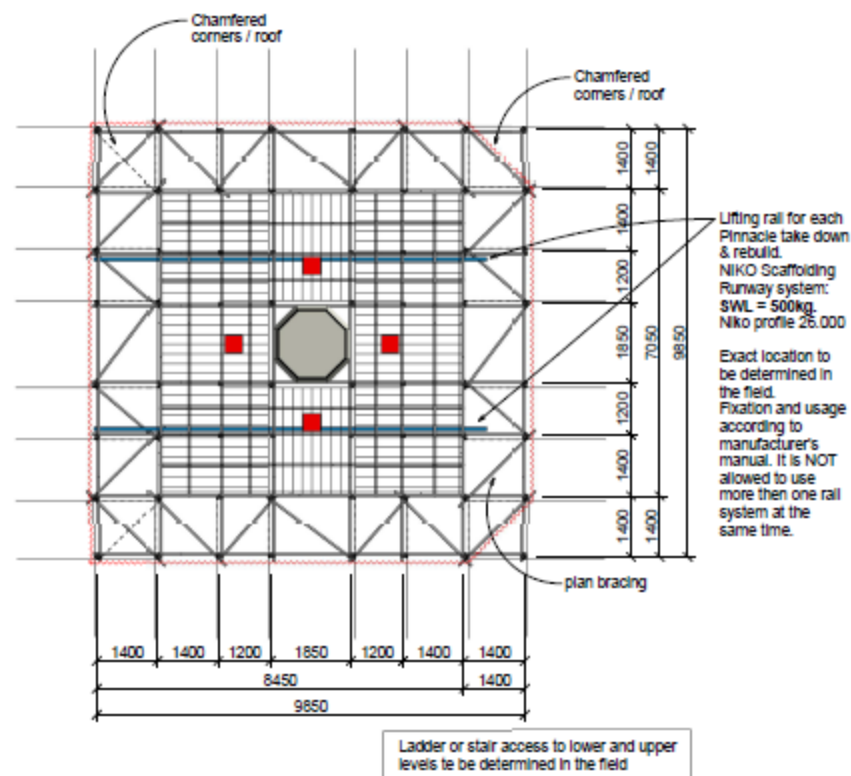
East view: level 06 - level 07



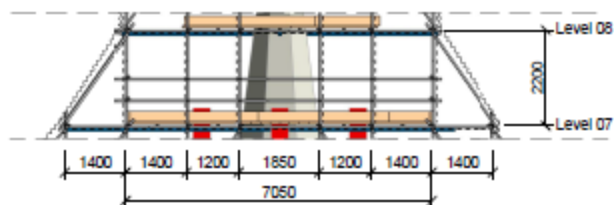
Level 07

During scaffold erection and when safe to do so the Tips of the pinnacles/Angels will be assessed as part the discussed lift by lift procedure and a decision made how best to protect these locations

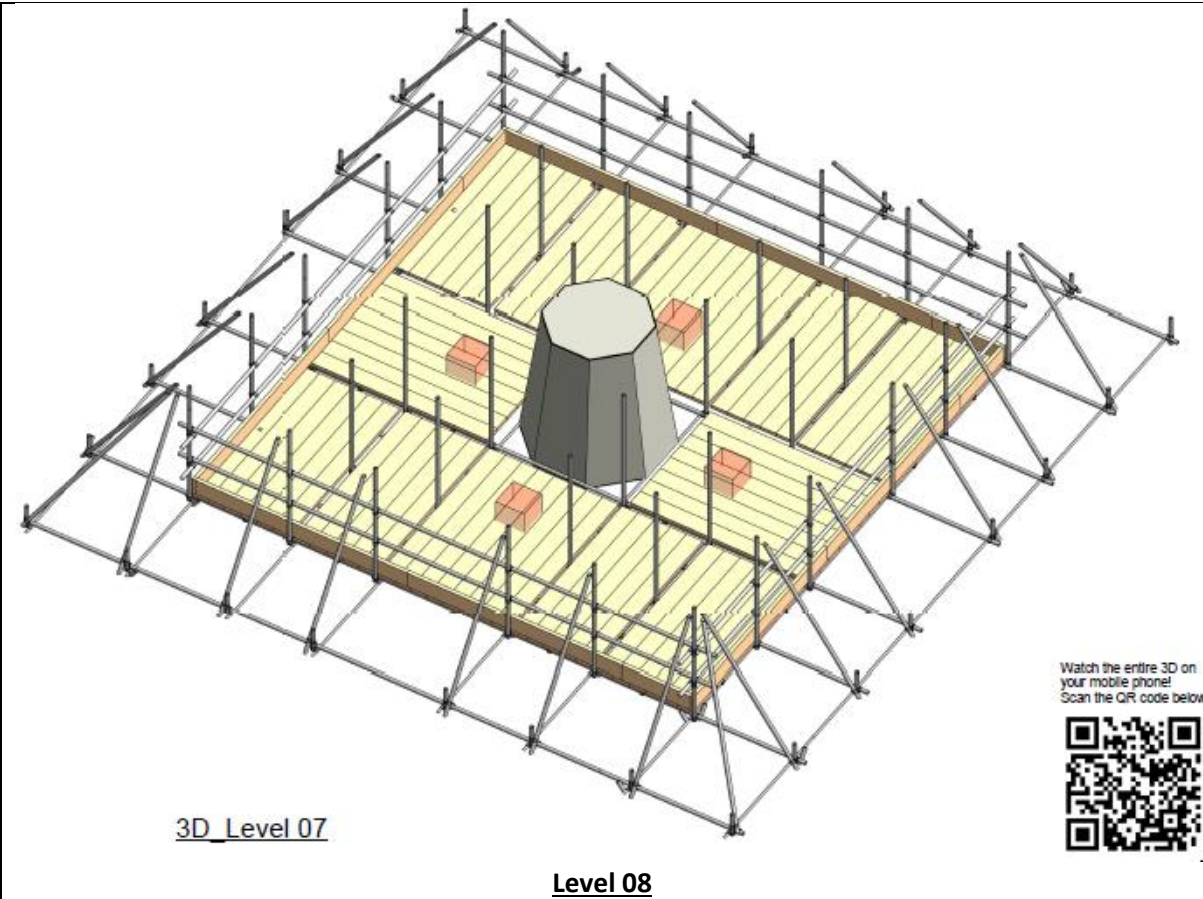
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Level 07



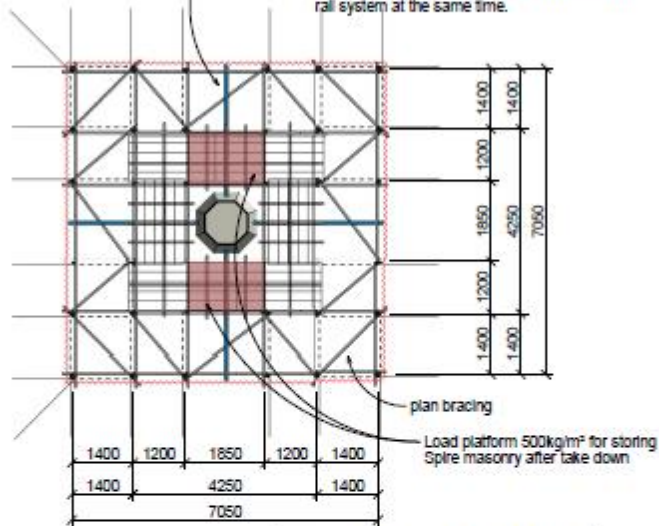
East view: level 07 - level 08



Overall transom rule: Board support transoms to be installed @ 0.90m o/c
 500kg/m² platform rule: Board support transoms to be installed @ 0.45m o/c

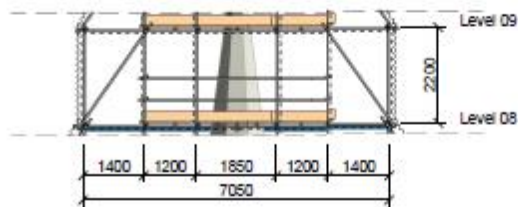
Possible location rail system
 NIKO Scaffolding Runway system:
 SWL = 500kg, Niko profile 26.000

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.

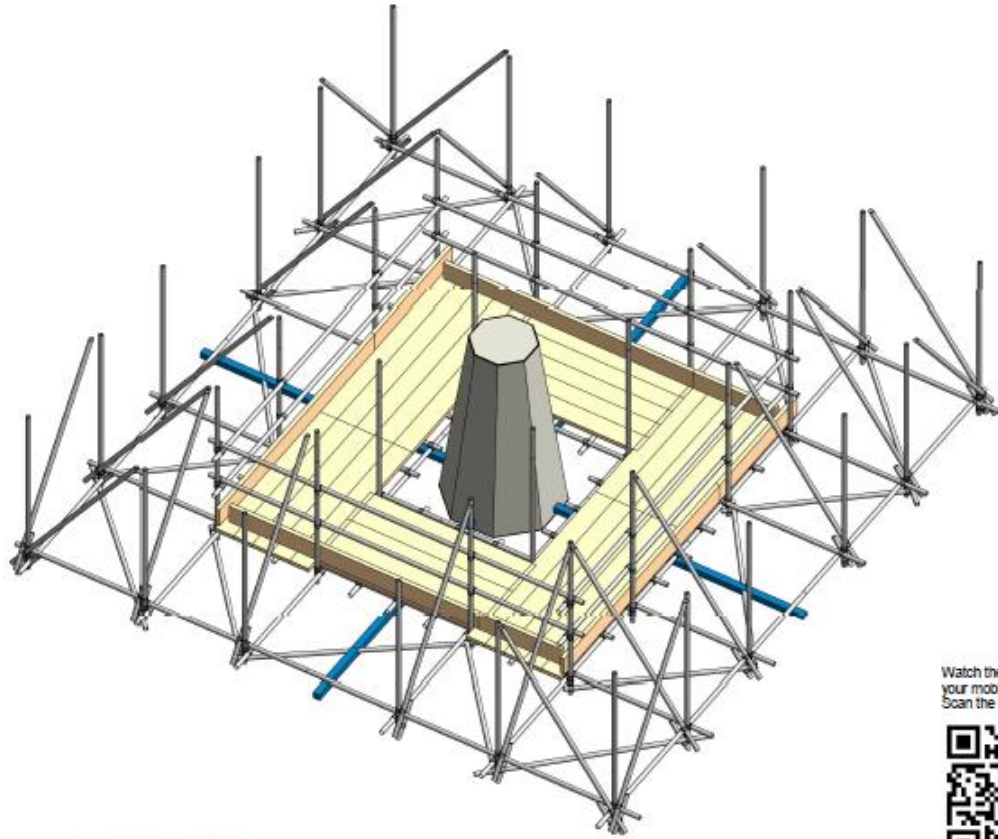


Ladder or stair access to lower and upper levels to be determined in the field

Level 08



East view: level 08 - level 09



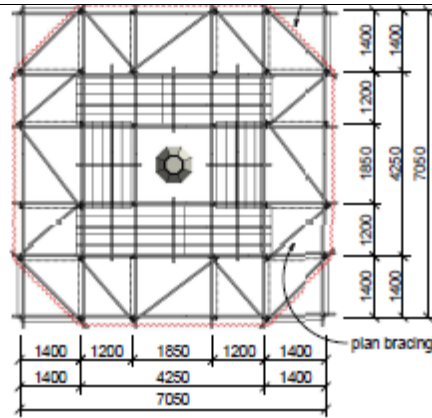
Watch the entire 3D on
your mobile phone!
Scan the QR code below



3D_Level 08

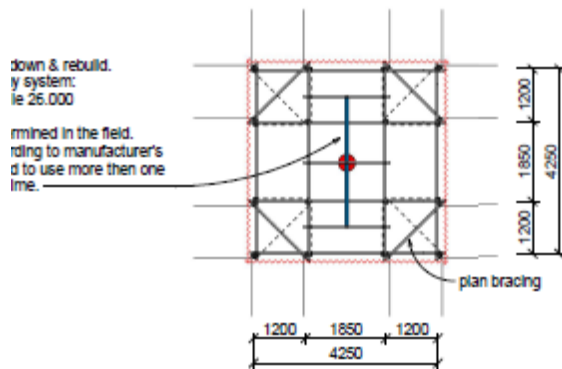
Level 09-11

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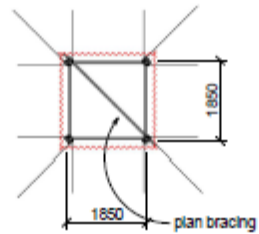


Level 09

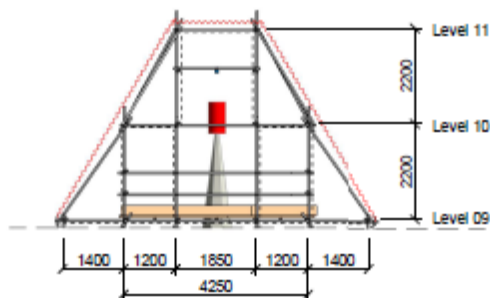
Ladder or stair access to lower and upper levels to be determined in the field



Level 10

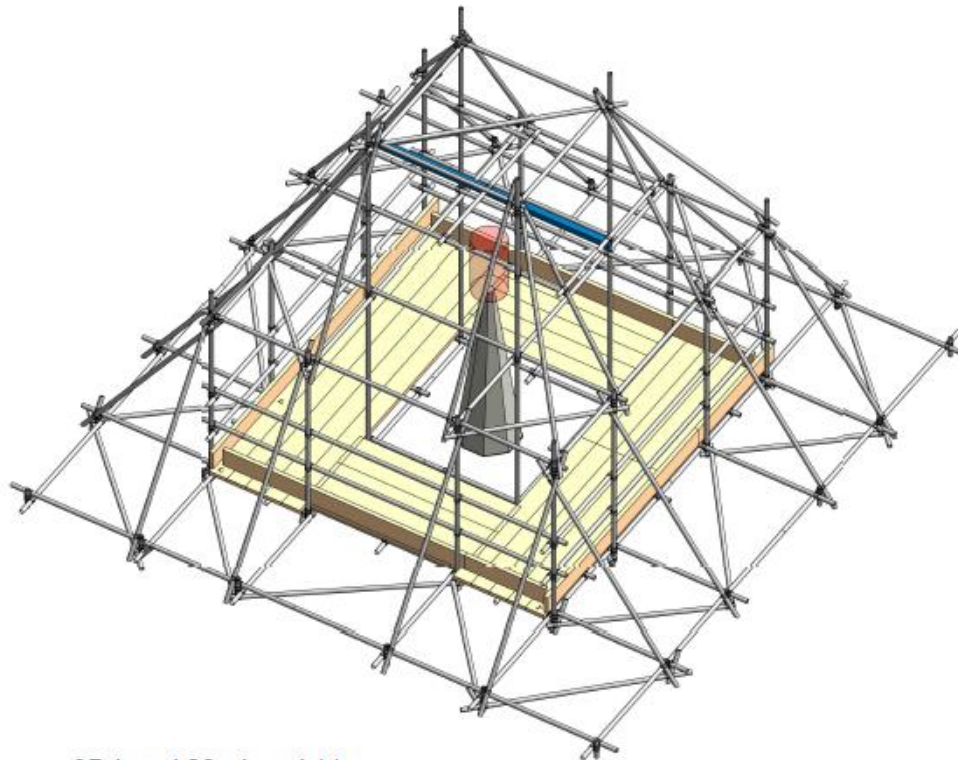


Level 11



East view: level 09 - level 11

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3D Level 09 - Level 11

Watch the entire 3D on
your mobile phone!
Scan the QR code below



During Erection of the further scaffold lifts/scaffold design the following statement will be true: -
Before each shift starts, during the JSP/Safe Start a discussion between supervision and the operatives will be held to highlight any locations where there could be a risk of close proximity working. These locations will be vigorously monitored by the supervision and works will be ceased if the supervisor feels the operatives aren't taking the additional care that's required. The safe start/toolbox talk will be re-iterated again at this point before the supervisor allows works to commence. This level of supervision and care will be maintained for the full duration of works to the albert square monument.

Lendlease will also be invited to observe works during close proximity working to ensure RAM's compliance.

Also, During erection of the further scaffold lifts/scaffold design the following statement will be true: -

DURING ERECTION OF THE ALBERT MEMORAIL SCAFFOLD, OPERATIVES ARE TO ENSURE THAT ALL SCAFFOLDING COMPONENTS REMAIN AT LEAST 100MM FROM THE MEMORIAL ELEMENTS

No Ties whatsoever will be installed to the Albert Memorial Statue. All scaffold structure stability will be controlled by the kentledge blocks to the base of the scaffold.

All the above associated risks and procedures will be adhered to during the dismantle of the access scaffold.

Prior to dismantle of the scaffold the following Hold Point will take priority: -

HOLD POINT - Due to the length of the hire period detailed RAMS review must take place prior to any dismantle works commencing, to highlight the changes to site conditions, associated risks, changes to legislation / working practices etc.

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Benchmark/Samples:

Heritage Considerations:	Controls:
Materials: (New, existing and waste streams)	Scaffold components i.e. tube, fittings, metal boards as a primary priority etc
Protection: (Exceptions to project strategy)	Scaffold tubes to have protective capping on near side prior to installation. 100mm clearance from any element of the memorial statue. Vigorous personal supervision during close proximity working. Rubber mats or similar to be placed under scaffold board bearers at the internal location - 12No. standards.
Building impact: (Vibration, dust, noise etc.)	Scaffolders impact wrenches, telehandler movements and general scaffold operations will cause noise in the compounds/work area
Tools/Equipment: (Type, use and calibration)	Scaffold components Concrete kentledge blocks Scaffold Spanner Cordless impact wrench Sprit level All tools, radios and mobile phones are to be tethered

Storage: (During works for reinstatement, long term off site)	Not Applicable		
Discovery: (Type to be expected and visual signs)	Not Applicable		
Workforce awareness: (Tool box talks and briefing by design consultant prior to works)	Method statement OTH-BEI-EE-ES-MES-X-0030 P02 Risk Assessment OTH-BEI-EE-ES-RSK-X-0031 P02 TBT – Albert Memorial Statue close proximity working awareness and protection procedures. Safe Start/JSP (Job Safe Plan) briefing Design Drawings OTH-BEI-EE-ES-DWG-X-0207-C01-A through to OTH-BEI-EE-ES-DWG-X-0217-C01-A		
Project Team Approval to Commence Works			
Organisation	Name	Signature	Date
MCC			

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Purcell			
ARUP			
Ramboll			
Planit			
Leandlease			
Works Contractor			