7th and 9th August 2018
Ref: 1444
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Recommendations / instructions throughout

KOKO – Site Visit Report No.11

1. Truss Remedial Works

1.1 Positioning of props.

We note that prop locations do not appear to line up between storeys. In the best-case scenario these provide no support, in the worst-case this may cause failure of the slabs / beams set between the misaligned props. We recommend that this is resolved and documented, potentially with the aid of a position survey.

1.2 Load path through existing structure.

As in this image, there is no clear load path through the existing structure with there being a gap between steel beam and slab above. Please provide calculations to show that the prop loads can be accommodated through all existing structure.

Has the existing structure been determined and justified?

1.3 Fixing of props.

Some props seem not to be fixed at all to the existing structure while others appear to be nominally connected with a single bolt or anchor. Has this been approved by the temporary works engineer?

1.4 Number of props.

It was our understanding that double mega-shores would be required (at least in the outermost locations) to carry the loads from the existing truss. Has the single prop solution been justified and signed off by the temporary works engineer?

If not, we strongly recommend that this is remedied as soon as possible as we do not believe that the truss can safely carry the load imposed on it.

1.5 Connection through rivetted steel.

The depiction shows a shore connected with a single bolt through a rivetted beam. There is a gap between the bearing surface and the flange due to the rivets, and this had not been packed or shimmed. Has this been checked / approved by the temporary works engineer?

1.6 Angle of props

Tower Demo's drawing shows a 5° angle to the shores at their highest level and no angle below, In practice there appear to be significant angles to all shores, has this been signed-off? Have the lateral forces into the existing diaphragms been justified?

1.7 Trial pit.

We note that there has been an investigation into the ground condition and structure below the lowest level of propping. Can this investigation and associated calculations please be shared with HTS for review.

1.8 Weatherproofing.

Daylight can be seen through the openings where secondary beams meet the truss. Please ensure that a robust weathering strategy is in place to avoid damage to structure and internal finishes as well as ingress of damp into the building fabrics.

For the future remedial works on the truss, it is likely that a full weathered and secured perimeter will need to be formed around the structure.

1.9 Further site visit.

We ask to see the condition of all propping connections once updated, please inform us of a suitable time / date to inspect the connections while fully exposed.

2. Demolition works

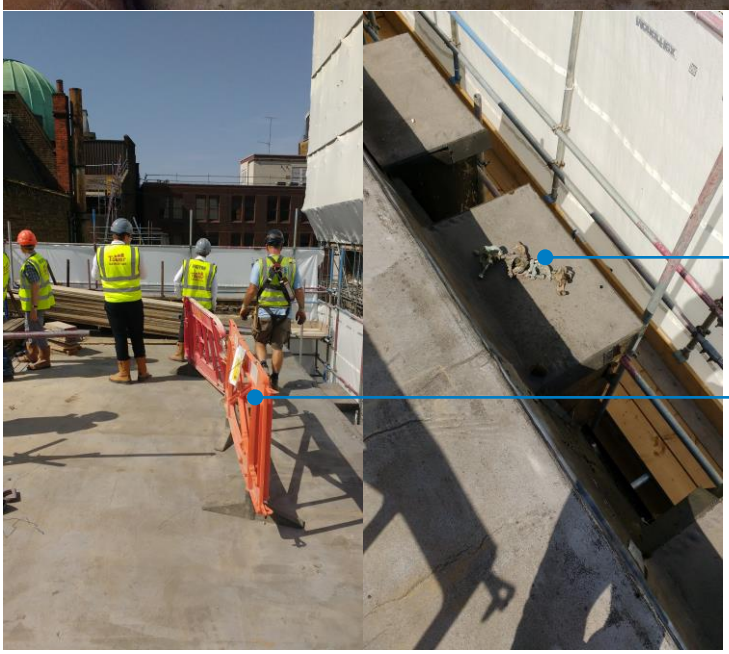
2.1 As per the picture, the Kentledge 'Lego' blocks are at an angle to the vertical. From discussions with Tower Demo, we understand that this can be accommodated in their design, but note that it may cause pavement access restrictions?

2.2 There are piles of old stone and brick loading the existing structure. Tower Demo noted that this has been allowed in their design, but we have not seen any calculations justifying this.

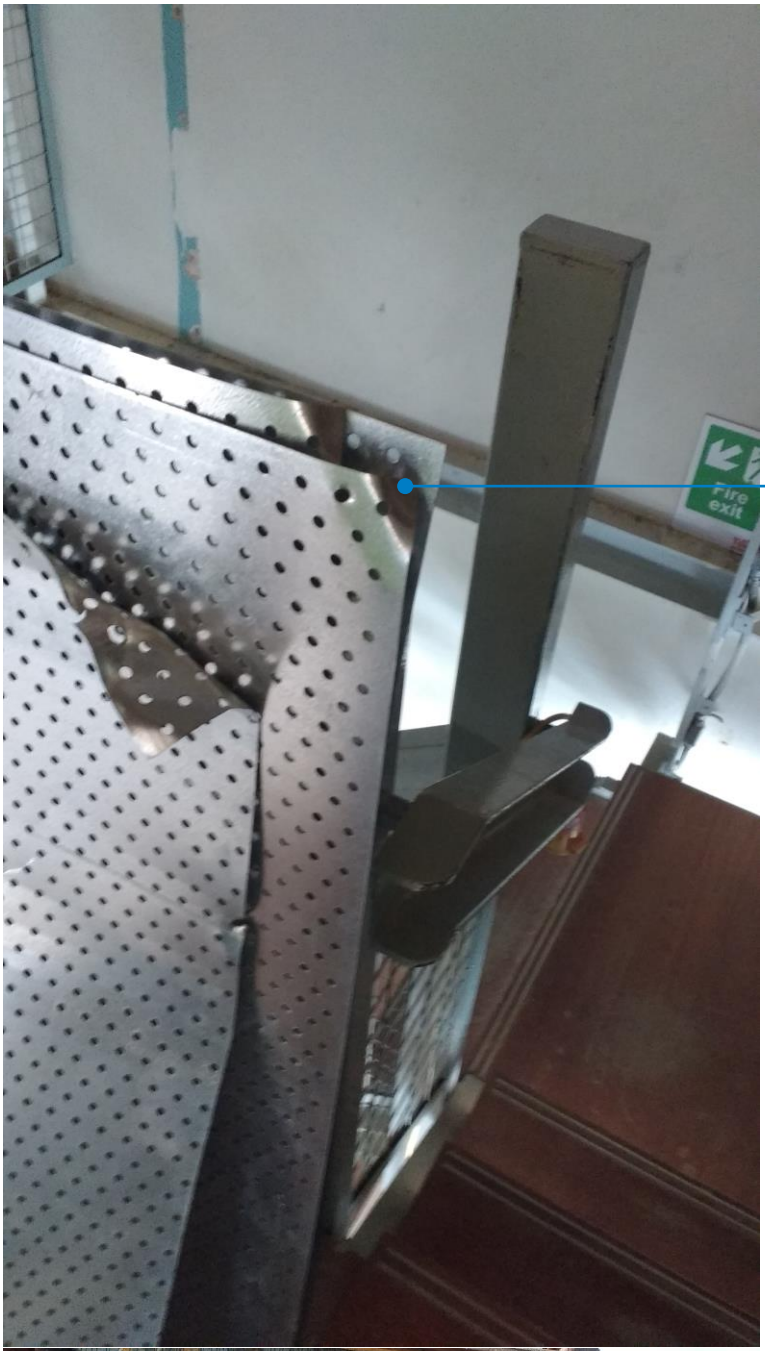
2.3 The access route to the top storey of the structure being demolished was blocked by an active flying shore. It was noted that the access would be redirected the next day. This is a H&S risk, and we ask that safe access / escape is ensured and monitored in future.

2.4 We note that single leaf timber lintels appear to have rotted and will likely need to be replaced / remedied for retained facades.

2.5 With water-ingress into thrust blocks, the concrete mix appears to have split, creating a solid, translucent topping. This may affect the capacity of the thrust blocks. Please confirm that these have sufficient capacity prior to activating / using the blocks.



2.6 The edge protection on the roof of Bayham Place is unclear and seems to be ignored (with evidence of tools stored on a window frame below). Please ensure that a clear, safe perimeter is enforced throughout the works.



2.7 Sharp metal sheets are stored adjacent to an access stair, and there is a risk of injury to personnel. Please store material in a safe location.

2.8 Who is the principal contractor for the remedial truss works? Does this form the same site as the demolition works?