

Structural Survey Report

of

Head of the River
St Aldgate's
40 Pembroke Square
Oxford
OX1 4LB

for

Fuller Smith & Turner Plc

Structural Survey Report

STRUCTURAL SURVEY AT: Head of the River, St Aldgate's, 40 Pembroke Square
Oxford, OX1 4LB

CLIENT: Fuller, Smith & Turner Plc

DATE OF SURVEY: 20th June 2023 & 15th August 2023

BRIEF

We have been instructed by our Client, Fuller Smith & Turner Plc, to inspect and assess the condition of the rear fire escape balcony and associated staircases and provide report on our findings.

Our inspection was visual only, non-intrusive and limited to areas that could be safely accessed.

DESCRIPTION

The Property is a grade II listed, three storey building with stone façade located adjacent to the river Thames. To the South of the property there is a timber fire escape balcony overhanging the river. This balcony connects to a fire escape on the eastern side and a terrace on the western side.

There are 2 existing timber fire escape staircases, one located on west side of the main building, and another located on the east side of the main building. There is a timber balustrade wrapping around the timber fire escape and timber terrace.

There was no access to the underside of the existing fire escape balcony and therefore our observation of this area was limited.

OBSERVATIONS

The west side external timber staircase, from the ground to first floor, has had numerous repairs undertaken over its lifetime. The bottom of the posts have become rotten and we have been informed proprietary steel shoes had been installed, though this wasn't visible during our inspection as they have been cladded over. Some sections of the timber stairs and balustrade have been spliced and patched repaired in the past.

The east side external timber staircase, from ground floor to first floor, also appears to have been repaired numerous times in the past. The posts show signs of rotting to both balustrade and treads, Moreover the treads appear loose and unstable. The handrail is also loose and it easy to move. In addition, there are several spindles loose and rotten.

On the eastern side of the building there is an existing external timber staircase from 1st to 2nd floor with its own timber roof. The timber stairs are supported by existing timber gallows bracket supports. The bottom half of these brackets are within the 1st floor roof structure. The existing timber roof is supported off the stone wall and the timber posts that form the timber stairs. The roofing felt appears in poor condition and some timbers showing signs of rot.

The south rear timber fire escape balcony also has been repaired numerous times in the past. The balcony structure is noticeably deflecting downwards towards its outside edge. The existing timber primary support beams appear rotten and are pulling from the existing building face. Timber posts for the balustrade are rotten at their base which has compromised the structures strength of the balustrade.

The Fire escape balcony and fire escapes stairs appear to be constructed from softwood timber and are supported by timber gallows brackets that are either fixed to the stone wall or supported by a stone plinth. There are also parts where the entrance lobby roof forms parts of the external fire escape structure.

We undertook an intrusive inspection of the ground floor ceiling and identified that the existing timber primary beams supporting the south fire escape balcony has a continuous span through to the internal wall support. One of the central timber beams appears to have been cut and removed internally and a 203 UC section steel beam installed adjacent to the original timber as a method of strengthening the existing structure. It appears the two edge primary beams for the fire escape balcony are built into the existing external walls.

Please refer to Site Audit Notes in the Appendix for details, comments and photographs of the observations made during our inspection.

CONCLUSION/RECOMMENDATIONS

It appears that the fire escapes and balcony have had numerous repairs undertaken in the past. There are several timbers which are rotten, connections details that have become weakened and excessive deflections are present. Therefore, we feel the external timber structures are inadequate and have reached the end of their design life.

We recommend removing the existing fire escape staircases and replace them in hardwood timber sections to match existing sections and connections details, like for like.

For the south fire escape balcony, we recommend replacing the primary timber beams and diagonal struts with new galvanised steel sections. We feel this will provide a structure will far less maintenance issues considering the difficulty in undertaking the repairs over the river. The steel beams would be painted to match the colour finish of the timber elements. The remaining structure including, joist, plan bracing, side gallows brackets and balustrade will be replaced in hardwood timber section to match the existing and connection details like for like.

Please refer to sketches 223157 SK01, SK02, SK03, SK04 for initial structural proposals.

We trust the above is sufficient for your present requirement. However, please get in touch if you wish to discuss anything.

End of Report.

Salman Zeb BEng
BAXTER GLAYSHER CONSULTING

Appendix:
Site Audit Notes



Prepared by
Salman Zeb BEng

223157-THE HEAD OF THE RIVER

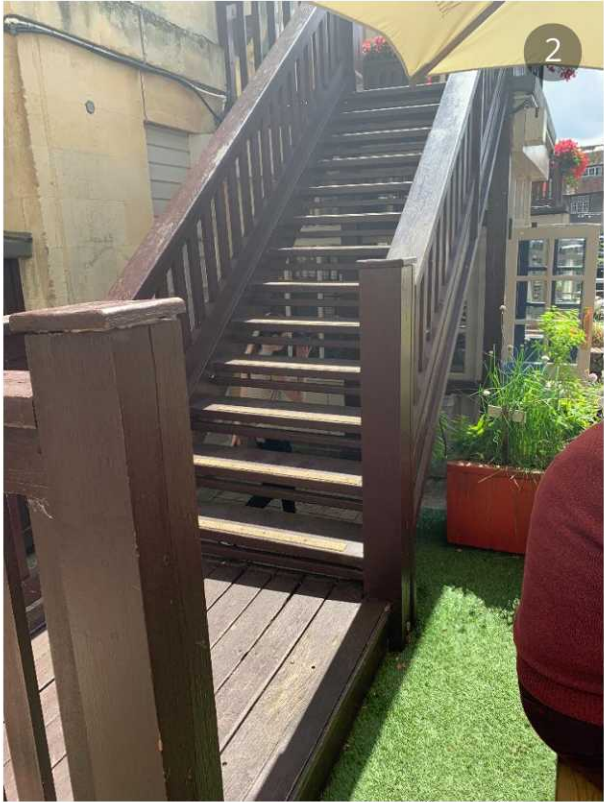
Structural Survey Photos

Wednesday, 16 August 2023

Prepared For Fullers, Smith & Turner plc

The Head of the River
Folly Bridge, St. Aldates
Oxford, Oxfordshire
OX1 4LB

WEST TIMBER FIRE ESCAPE

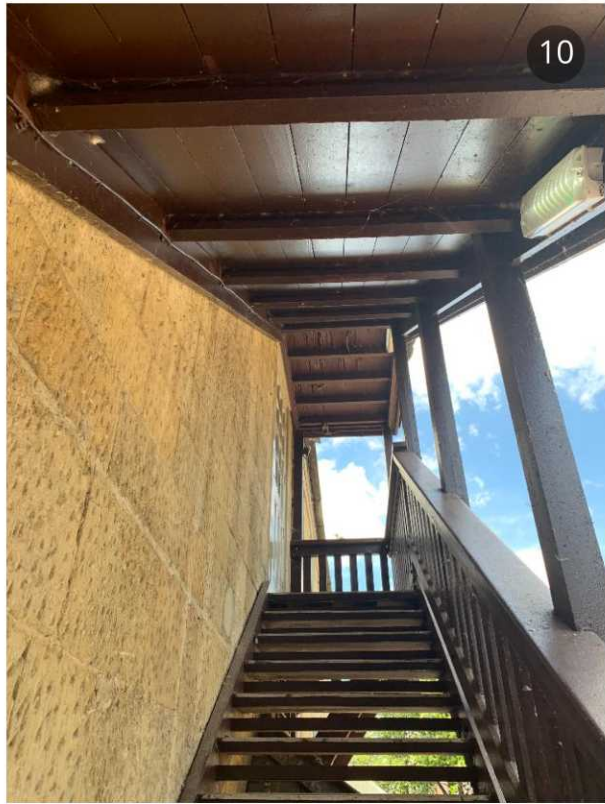




EAST TIMBER FIRE ESCAPE







SOUTH REAR TIMBER FIRE ESCAPE BALCONY

