

## The Hope Project – Site Visit Report No.10

### 1. Dome roof truss investigations



1.1 TD have exposed the southern end of the existing steel roof truss that supports the dome.



1.2 Severe deterioration/delamination of the truss top chord was observed, likely caused by water ingress during the life of the building. Delamination has caused a reduction in effective steel area will consequently reduce the capacity of the existing truss.

HTS have measured the existing member sizes and will carry out an analysis to estimate the capacity of the truss to inform the client of any potential collapse risk.



1.3 Delamination of existing steel truss top chord.



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1.5 The connection of the existing roof beam to the truss vertical was observed below the brick parapet.

The existing connection appears to be a bearing connection (approx. 30mm) on a 200x90x15 angle connected to the truss bottom chord with 6no. bolts (30mm hex bolt head).