STRUCTURAL SURVEY
FOR FIRE DAMAGED PROPERTY –
CROUCHERS, BIRDHAM ROAD, CHICHESTER PO20 7EQ7

1. The inspections were carried out on Tuesday 15th September 2020, on Monday 12th October and on Wednesday 6th January.

2. Description

2.1 The property was a two-storey five-bedroom detached house with several outhouses.

2.2 The property was thought to have been constructed probably in late 18th century or early 19th century and is Grade II listed.

2.3 For the purposes of this report, the front of the building was assumed to face west.

3. Observations

3.1 The fire was noted to have been located in the north wing of the building, which comprised a lower store room housing freezers and other contents. A bedroom was present above and there was a short corridor section leading towards the main building.

3.2 The fire was believed to have commenced in the lower ground floor area, due to a refrigerator. The fire has seriously damaged the floor joists above and appears to have probably gone into the first-floor bedroom, possibly via the void created by the stairs and lath and plaster covering the east wall of the building.

3.3 The fire may have caused damage to the rafters and externally it was noted that the tiles were missing in an area of approximately 2m wide x 3m high. (This may have been an access made by the fire brigade.)

3.4 The structural damage appeared to be generally isolated to this area, although in the hall area accessing the kitchen and study a section of the lath and plaster ceiling was noted to have collapsed.

3.5 Although the structural damage was limited to the north wing in general, severe smoke damage was present throughout the property.

4. Conclusions and Recommendations

4.1 In order to ensure that the roof is protected where open, I requested the contractor install tarpaulin sheets over it on a temporary basis, with a scaffold roof being provided over this small section of the building.

4.2 The damaged part of the roof was not accessible from the loft space due to safety reasons but in accordance with photos, it seems that the existing

roof was constructed in a combination of softwood and hardwood timber. I assume that the fire damaged rafters and ceiling joists are made of oak.

4.3 The cleaning of the property (smoke contaminated finishes) is being undertaken using appropriate method such as dry ice blasting to exposed timbers.

4.4 The property will require a complete rewire.

4.5 The beam and the floor joists in the basement were heavily damaged by fire and repair is not possible. The size of replacement structure should meet current design standards.

View of damaged part of the roof externally

Detail of damaged roof

View of damaged part of the roof internally

View of fire damaged ceiling in the corridor on the ground floor

Detail of fire damaged ceiling in the corridor on the ground floor

Cladding of the wall between the stairs to bedroom 5

View of fire damaged structure in bedroom 5

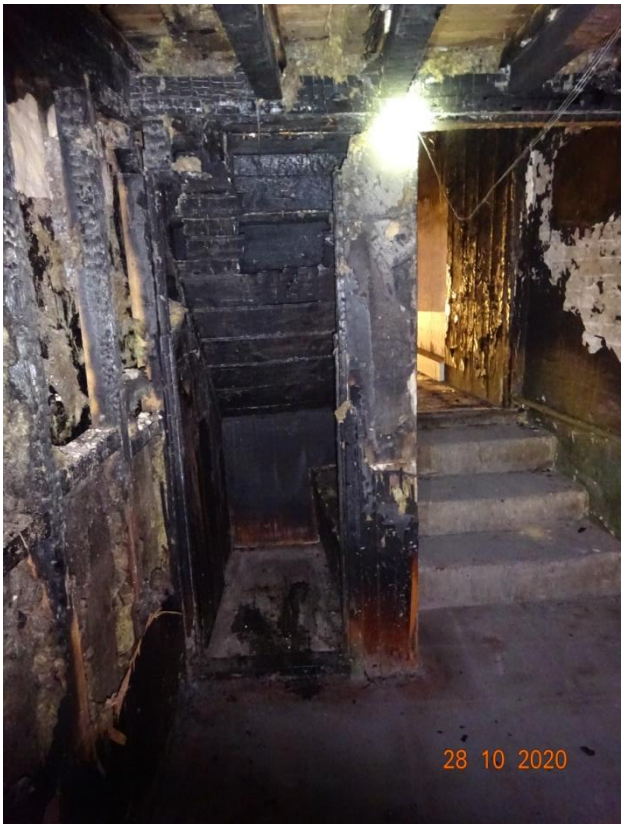
View of fire damaged structure in bedroom 5

Detail of deteriorated and infected timber stairs from bedroom 5 to the hall on the first floor

Detail of cladding of the wall between the stairs to the basement

View of fire damaged floor joists in the basement

View of fire damaged window in the basement

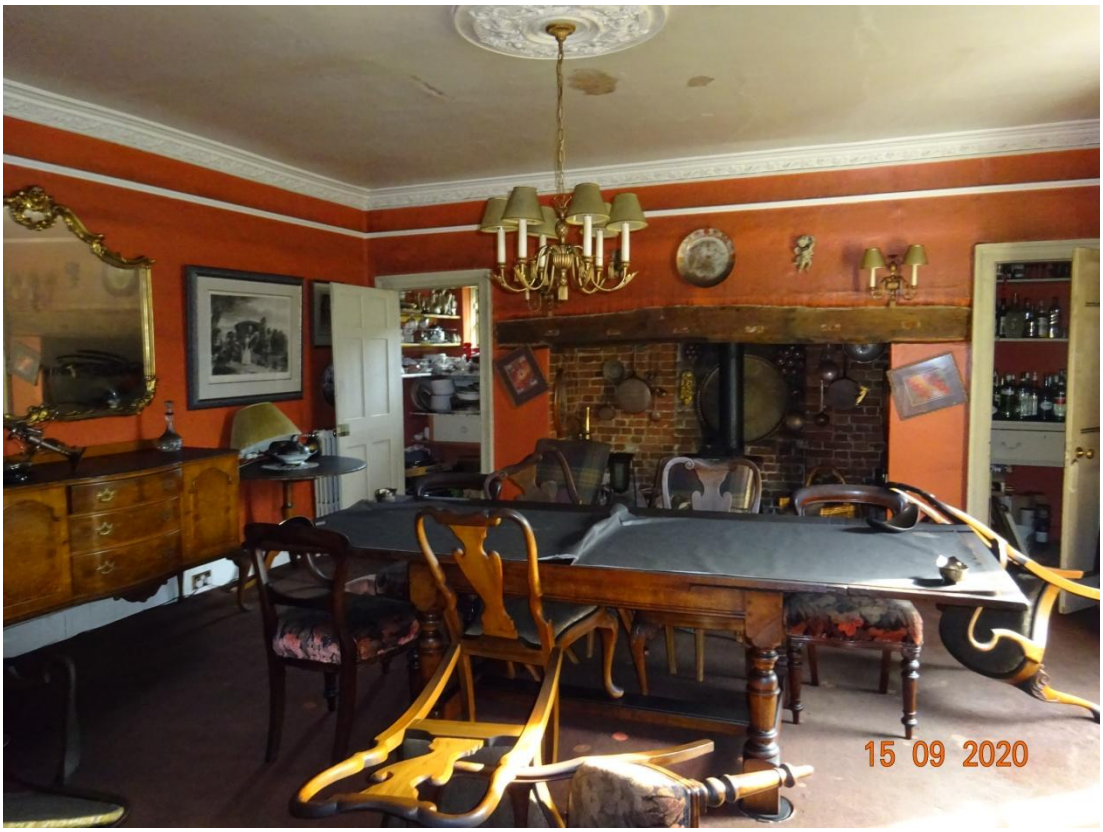


View towards the corridor on the ground floor from the basement

Damaged lath & plaster ceiling in the hall on the ground floor

Part east elevation

Living room after fire



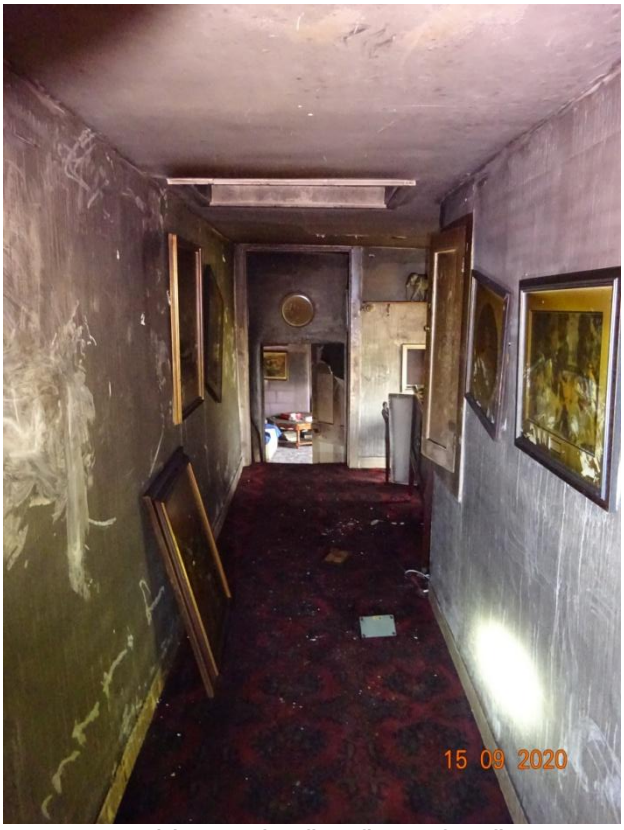
Dining room after fire

Hall on the ground floor after fire

Study after fire

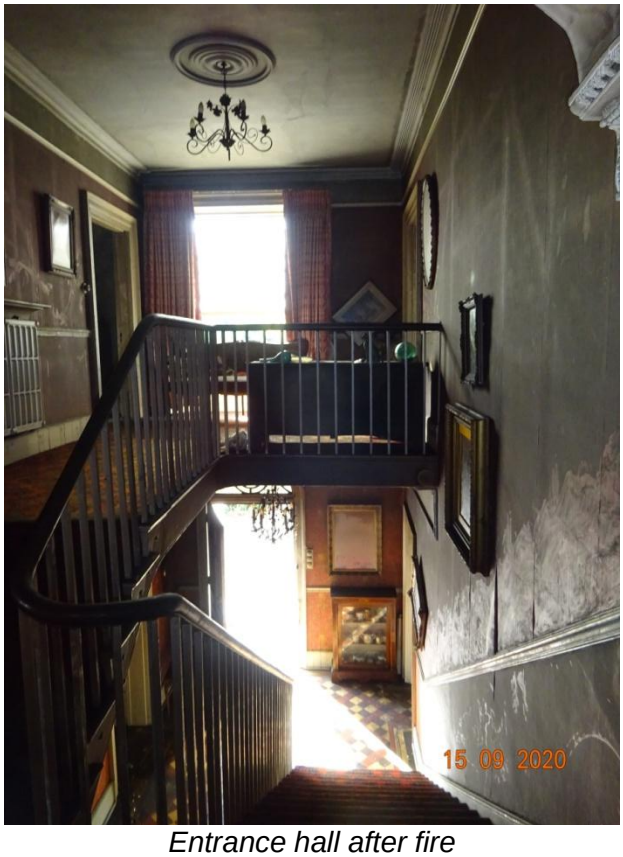
Bathroom on the ground floor after fire

Kitchen after fire



Corridor on the first floor after fire

Family bathroom on the first floor after fire



Entrance hall after fire

Bedroom 2 after fire

Bedroom 1 & en-suite after fire