### Mr Andrew Coles Coles Conservation Architects

Vale of Health Public Conveniences, Hampstead Heath, London

Preliminary Diagnostic Non - Destructive Environmental Timber Decay Survey

Site Visit: 11<sup>th</sup> November 2024

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# Contents

1	Introduction	1	
1.1	Limitation of Survey	1	
2	Executive Summary	2	
2.1	Observations		
2.2	Recommendations	Ζ	
3	Observations	3	
3.1	General	3	
3.2	South Elevation		
3.3	East Elevation		
3.4	North Elevation	5	
3.5	West Elevation	5	
3.6	Moisture Contents	6	
4	Recommendations	9	
4.1	South Elevation	9	
4.2	East Elevation		
4.3	North Elevation	9	
4.4	West Elevation		
Apper	ndix 1: Marked Sketches Showing Decay	1	
Apper	Appendix 2: Resistograph Drillings		

### 1 Introduction

Environmental Building Solutions Ltd (EBS) carried out a Preliminary Diagnostic Non-destructive Environmental Timber Decay Survey of the timber frame at the Vale of Health Public Conveniences, Hampstead Heath on the 11<sup>th</sup> November 2024 in accordance with e-mail instructions from Mr Andrew Coles on 17<sup>th</sup> October 2024.

The following report contains details of our observations and recommendations.

Orientation was taken from the plans provided.

#### 1.1 Limitation of Survey

The investigation was carried out to accessible timbers only. This was further restricted by demolition materials on the floors making access limited for safety reasons.

It must be stressed at the outset that EBS has prepared this report only for the consideration of the parties concerned in the process of resolving the problem.

This report does not constitute an investigation of the potential structural and design defects identified at the Vale of Health Public Conveniences, Hampstead Heath and must not be taken as such. The report is not intended as a definition of structural damage for the purposes of litigation or as a specification for the remedial works.

An inspection of a property of this age and type of construction is subject to restrictions. As EBS has not inspected the building at other stages during the refurbishment, we cannot comment upon the workmanship in areas that are now covered or otherwise concealed.

Concealed timbers and cavities have not been investigated. The condition of some concealed timbers may be deduced from the general condition and moisture content of the adjacent structure.

Only demolition or exposure work can enable the condition of the structure to be ascertained with certainty and this destroys what it is intended to preserve. Specialist non-destructive investigative techniques are therefore employed as aids to the surveyor.

No such technique can be 100% reliable, but their use allows deductions to be made about the most probable conditions of materials at the time of examination.



## 2 Executive Summary

Environmental Building Solutions Ltd (EBS) carried out a Preliminary Diagnostic Non-destructive Environmental Timber Decay Survey of the timber frame at the Vale of Health Public Conveniences, Hampstead Heath on the 11<sup>th</sup> November 2024 in accordance with e-mail instructions from Mr Andrew Coles on 17<sup>th</sup> October 2024.

The following report contains details of our observations and recommendations.

Orientation was taken from the plans provided.

#### 2.1 Observations

The timber frame was visually inspected, probed with a sharp screwdriver, sounded with a hammer and where necessary drilled with a 6mm diameter drill bit and Resistograph, see plans for location of Resistograph drillings.

Decay was found to timbers on all elevations as detailed in the report, although the majority of accessible timbers were found to be sound and free of decay.

#### 2.2 Recommendations

Repairs are required to structurally decayed timbers as detailed in the report.



## 3 Observations

See plans for numbering and location of decay found.

#### 3.1 General

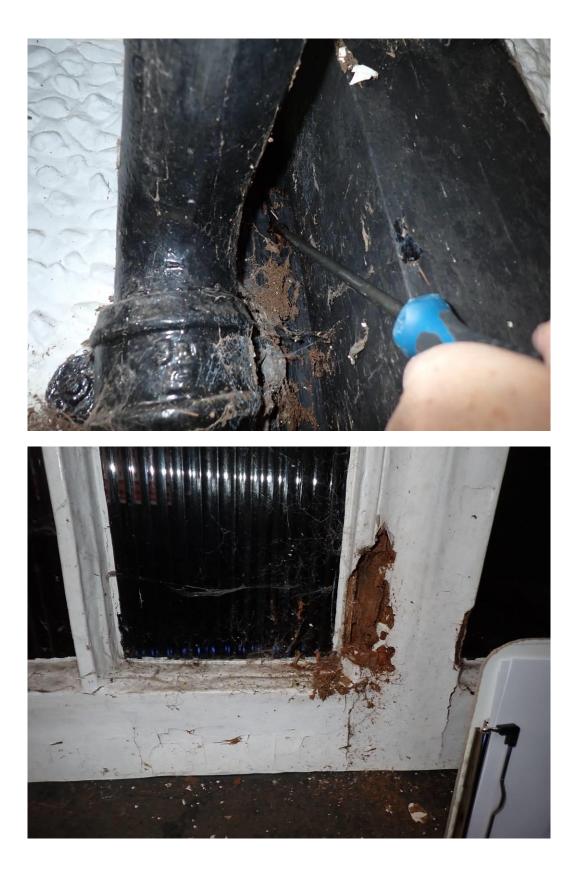
The timber frame was visually inspected, probed with a sharp screwdriver, sounded with a hammer and where necessary drilled with a 6mm diameter drill bit and Resistograph, see plans for location of Resistograph drillings.

#### 3.2 South Elevation

The timber frame was found to be structurally decayed by wet rot at the west side of the elevation, see plans for location. The type of decay was not identified as no fruiting bodies were found. The rafter ends above the west window were not accessible but could be decayed in the location shown on the plans. The west corner post was decayed at the base up to 150mm from the base, see plans and Resistograph drilling 103.







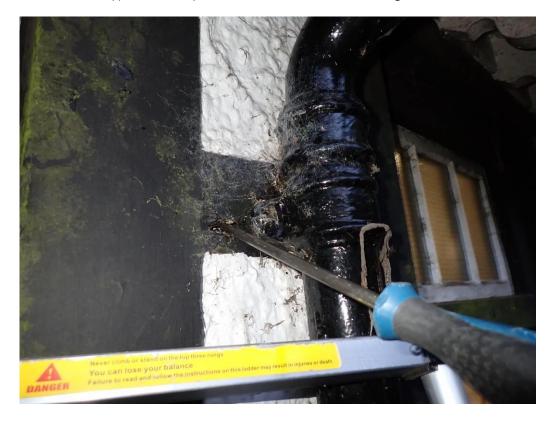


#### 3.3 East Elevation

The timber frame was found to be structurally decayed by wet rot below the south and central window, see plans for location. The type of decay was not identified as no fruiting bodies were found. The report of 2014 identified decay to the frame at the south end of the elevation. These timbers were found to be sound which suggests that repairs must have been carried out.

#### 3.4 North Elevation

The sole plate to the timber frame was found to be structurally decayed centrally and a timber at high level east of the door behind the downpipe. see plans for location. The type of decay was not identified as no fruiting bodies were found.



#### 3.5 West Elevation

The timber frame was found to be sound. The south corner post was decayed at the base, see south elevation.

Vale of Health Public Conveniences Timber Decay Report Feb 2024.doc 5



#### 3.6 Moisture Contents

The timber moisture content was measured with a protimeter. The timbers were generally dry although up to 20% which would be expected for timber on the exteriors. The decayed window frame was saturated at 45%.



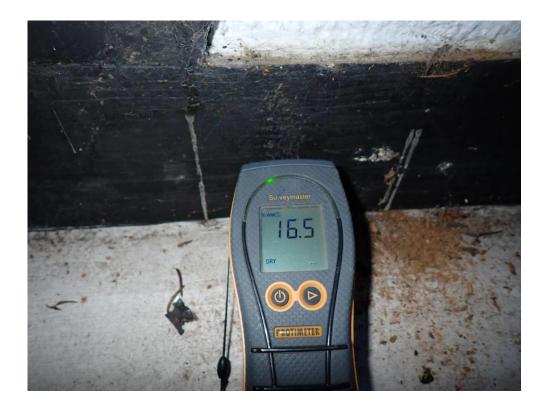


Vale of Health Public Conveniences Timber Decay Report Feb 2024.doc 6

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## 4 Recommendations

See plans for numbering and location of decay found.

#### 4.1 South Elevation

Allow for renewal of the decayed sections of the timber frame and west window, see plans for location. Expose the rafter ends above the decayed west window for inspection. Allow for partnering the rafter ends if decayed.

Allow for a splice repair to the base of the west corner post to 150mm from the base.

#### 4.2 East Elevation

Allow for renewal of the decayed sections of the timber frame below the south and central window, see plans for location.

#### 4.3 North Elevation

Allow for renewal of the decayed section of the sole plate centrally and the timber at high level east of the door behind the downpipe, see plans for location.

#### 4.4 West Elevation

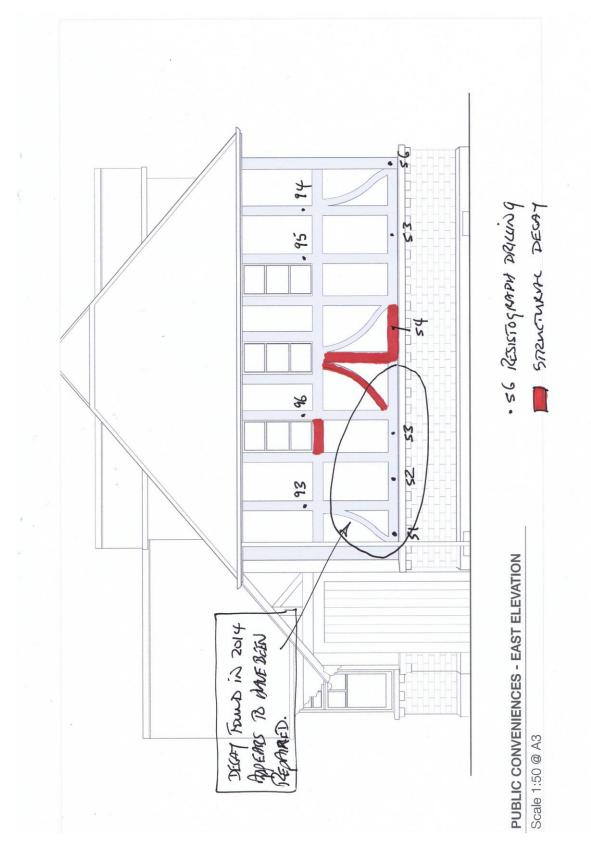
The south corner post was decayed at the base, see south elevation.



## Appendix 1: Marked Sketches Showing Decay

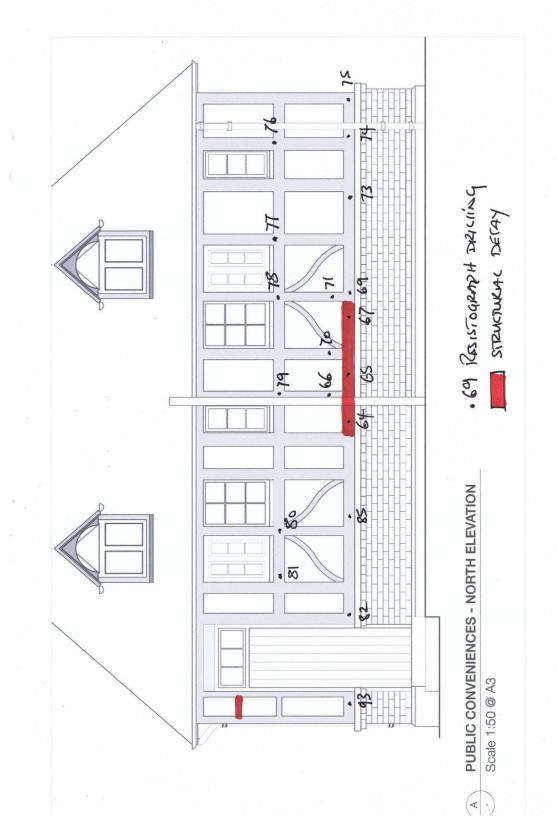
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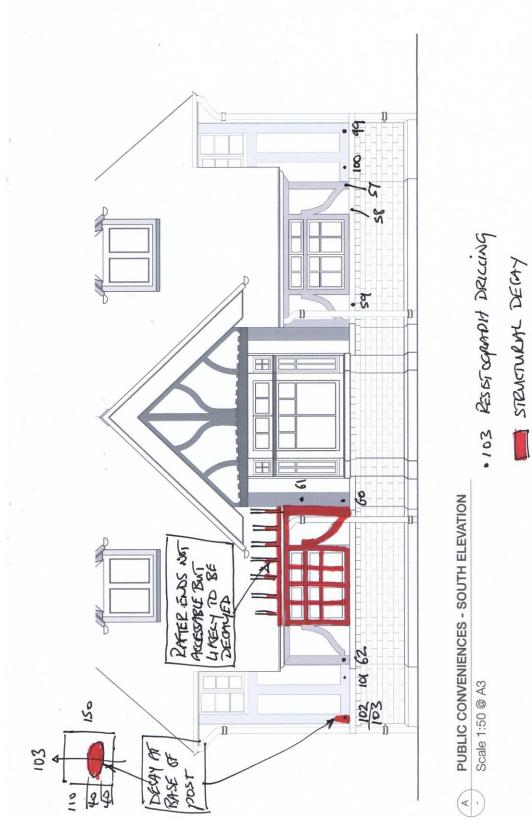








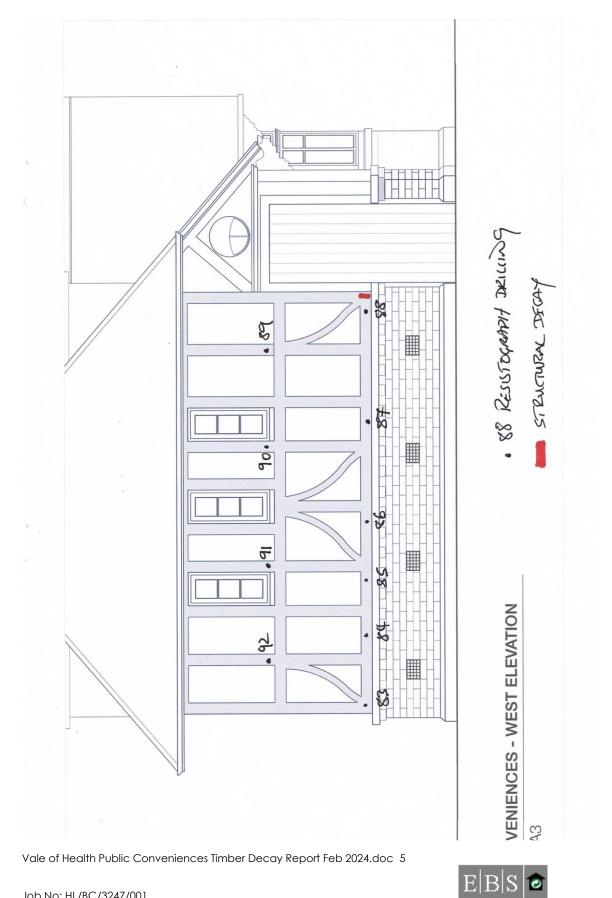




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# Appendix 2: Resistograph Drillings

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