

REPORT



Civil & Structural
Design Engineers

HUDSWELL HOUSE HUDSWELL LANE CORSHAM SN13 9JE

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PREPARED BY **MAB / CS**
CHECKED BY **DS**
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London london@dsagroup.co.uk | Birmingham birmingham@dsagroup.co.uk

Cheltenham cheltenham@dsagroup.co.uk | Northampton northampton@dsagroup.co.uk

dsagroup.co.uk

David Smith Associates LLP trading as DSA, 8 Duncan Close, Moulton Park, Northampton NN3 6WL. Registered in England & Wales.
Registration No. OC445095. VAT No. 443661395



Preface

- a) This brief, preliminary report and/or opinion has been prepared for the specific purpose stated herein.
- b) The report has been prepared for the exclusive use of Richard Parker of VIVO Defence Services Limited, Shared Services Centre, Part First Floor, Neon, Q10 Quorum Business Park, Benton Lane, Newcastle-Upon-Tyne, NE12 8DU
- c) This document, or any part of this document, shall not be disclosed to any other persons except those specifically mentioned as follows:
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- e) It is a condition of this report that we have not inspected all woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that such parts of the property are free from defect.

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1. Existing Construction

- 1.1. Thank you for your instruction to prepare a repair schedule and specification in relation to the existing flat roof and glazed lantern structure located within the internal courtyard of the Grade II listed dwelling.
- 1.2. The property is a late 17th-century rubble stone house with stone tiled roof coverings, moulded coping to gables and prominent historic chimney stacks. The building is of significant architectural and historic interest, including mullioned windows with hoodmoulds, bolection-moulded doorcase, and surviving internal fireplaces of historic importance.
- 1.3. The works relate to a flat roof area positioned within a courtyard formed by later additions, including an early C20 single-storey range. The flat roof incorporates a glazed pyramid lantern set on a raised kerb.
- 1.4. The existing roof appears to comprise:
 - Timber structural deck (exact build-up unconfirmed)
 - Bituminous / mineral felt type waterproof covering
 - Formed timber upstand/kerb
 - Metal-framed glazed lantern (likely C20 insertion)
 - Perimeter flashings abutting rubble stone masonry
 - Internal rainwater outlet discharging to cast iron pipework
- 1.5. No intrusive investigation has been undertaken at this stage. Observations are based on visual inspection only.

2. Observations

2.1. The flat roof covering is in a deteriorated condition and has demonstrably failed in areas.

2.2. Defects observed include:

- Persistent ponding and inadequate falls
- Surface breakdown and patch repairs
- Biological growth indicating prolonged moisture retention
- Debris accumulation at drainage outlets
- Poorly detailed junctions at upstands and abutments

2.3. Internally, evidence of historic water ingress is present. Cracking and distortion to the lantern upstand lining were observed, likely associated with moisture-related timber movement. Given the known leakage, concealed decay to the timber deck and possibly supporting members is considered likely, although confirmation will require strip-out.

2.4. The lantern appears to be a later addition and not part of the original C17 fabric. The metal frame shows weathering but may be suitable for refurbishment subject to detailed inspection following removal.

2.5. Drainage arrangements are vulnerable to blockage due to limited falls and debris collection at outlets. This is likely a primary contributor to the roof failure.

3. Proposed Works

- 3.1. It is proposed that the existing flat roof covering and lantern be carefully removed to allow full inspection of the supporting structure.
- 3.2. Following removal, the works should comprise:
- Inspection of all timber decking and supporting joists
 - Replacement of any decayed or structurally compromised timbers on a like-for-like basis
 - Formation of improved falls where practicable without altering visible roof geometry
 - Installation of a new flat roof covering system appropriate to a listed building context
- 3.3. The replacement covering should replicate the existing visual appearance unless otherwise agreed with the Local Planning Authority. Acceptable options may include:
- High-performance built-up bituminous system
 - Lead sheet covering (subject to conservation approval)
 - Alternative system approved by the Conservation Officer
- 3.4. All abutments, upstands and junctions are to be re-detailed in accordance with current best practice to ensure long-term weathering performance while remaining visually discreet.
- 3.5. The lantern is to be:
- Carefully dismantled
 - Assessed for corrosion and glazing condition
 - Refurbished and reinstalled if structurally sound

- 3.6. If replacement proves necessary, the new lantern must match the existing in profile, material and appearance.
- 3.7. Drainage should be rationalised to ensure reliable discharge and ease of maintenance. Internal rainwater routing may remain, if necessary, due to heritage constraints, but detailing must be robust and serviceable.
- 3.8. All works must be undertaken by contractors experienced in historic fabric and traditional materials.

4. Schedule of Works

4.1. The contractor is to allow for the following:

1. Erection of suitable access and protection to courtyard and surrounding historic masonry.
2. Careful removal and protection of existing lantern for assessment and potential reuse.
3. Full strip of existing flat roof covering down to structural deck.
4. Removal of defective boarding and exposure of supporting structure.
5. Inspection of timber joists and deck for rot, fungal decay or structural weakness.
6. Replacement of decayed timber members on a like-for-like basis using appropriate treated or durable timber.
7. Introduction of furring pieces where required to improve falls.
8. Installation of new flat roof covering system (final system to be agreed with contract administrator and conservation officer).
9. Renewal of all flashings, upstands and perimeter weathering details.
10. Rationalisation and improvement of drainage outlets and discharge arrangement.
11. Refurbishment of lantern frame including:
12. Cleaning and preparation
13. Treatment of corrosion
14. Replacement of defective fixings
15. Renewal of gaskets/seals
16. Reinstallation of lantern onto newly formed kerb with appropriate weatherproof detailing.
17. Internal making good to finishes disturbed by the works.
18. Allowance for temporary weather protection during construction.

4.2. All materials and methods are to be compatible with historic masonry and existing fabric.

5. Heritage Statement

- 5.1. The building is a late 17th-century Grade II listed structure of considerable architectural significance. The flat roof area and lantern form part of a later courtyard arrangement and are not considered primary historic fabric.
- 5.2. The existing flat roof covering is modern and in failure. The lantern also appears to be a later insertion and does not form part of the original C17 design.
- 5.3. The proposed works are repair-led and conservation-focused. They seek to:
- Remove defective modern materials
 - Safeguard the underlying historic structure from ongoing moisture damage
 - Reinstall roof coverings using sympathetic materials
 - Retain and refurbish the lantern where feasible
- 5.4. No alteration is proposed to the form, massing, or character of the listed building. The works are considered necessary to preserve the fabric of the building and prevent further deterioration.
- 5.5. The proposals are therefore consistent with the duty to preserve the special architectural and historic interest of the property.

6. Certification

6.1. We trust that we have interpreted your instructions correctly and that this report satisfactory for your present requirements. However, should you require any further information or clarification, please do not hesitate to contact the undersigned.

6.2. Signed

AQIB BHATTI

DSA LLP

03/03/2026



7. Appendix A – Photographs

Photographs



Photograph 01



Photograph 02

Photographs



Photograph 03



Photograph 04

Photographs



Photograph 05



Photograph 06

Photographs



Photograph 07



Photograph 08

Photographs



Photograph 09



Photograph 10

Photographs



Photograph 11



Photograph 12

Photographs



Photograph 13



Photograph 14

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Photograph 15



Photograph 16

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Photograph 17



Photograph 18

Photographs



Photograph 19



Photograph 20

Photographs



Photograph 21



Photograph 22