

NEIL **MARSDEN** ASSOCIATES INDEPENDENT DAMP & TIMBER CONSULTANTS



Timber Survey

Property Address	Chippenham Borough Lands Charity Bank House Bath Road Chippenham Wiltshire SN15 2SA
Client Name	Katia Hinic
Inspection Date	29 th of June 2026
Surveyor	Sean Rooney CSRT CSSW

1. Survey Introduction

Following your instructions on May 29th, 2026, I visited the above property to undertake a timber condition survey of the existing timber arch braces, pendants, finials and associated gable details on one of the elevations (draft drawing attached within the report) to determine the extent of decay, whether elements can be repaired or require replacement, and the recommended repair approach. I hope I have interpreted your instructions correctly; if not, please get in touch with my office immediately for clarification.

My inspection was carried out with the aid of an electronic moisture meter on all accessible wall surfaces, and it would be regarded as a non-invasive survey. This is the most acceptable method for general survey work, as several readings can be taken in a short space of time with minimal disturbance to the decoration. If you require a more detailed investigation, i.e. destructive sampling, please do not hesitate to contact my office.

All directions in the report are as if facing the property from the green below, toward the front door.

My report refers to the condition of the property at the time of inspection. If my inspection were restricted, I would clarify this in the body of my report and the support sketch.

The inspection was minimally invasive, meaning the structure was not significantly damaged or disturbed for the purpose of my survey. If further investigation is needed where parts of the property cannot be accessed, details will be provided throughout the relevant section of this report.

2. How a moisture meter works

As part of the inspection, the electronic moisture meter was also used to ascertain the moisture content of timber, i.e. skirting boards and second-fix timber. The readings obtained can be interpreted as follows:

17-18% - Might be in contact with dampness but unlikely to rot.

18-20% - Almost certainly in contact with dampness, although not yet a significant risk of rot.

>20% - Timber that is in contact with dampness is at significant risk of rot. It is generally accepted that timber with a moisture content above 20% is vulnerable to fungal decay. While a moisture content above 26%- 28% is required for fungal spores to germinate, it can be sustained at moisture contents as low as 20% once an infection is established.

3. About the Inspection

Instruction	To inspect the external decorative exposed timber gable end for signs of decay, as instructed above.
Property Status	Occupied Office.
Weather	It was dry and sunny during my inspection, with temperatures around 20 degrees C.

4. About the Property

Property Type	External timber gable end that is part of an office for business/charity use.	Estimated Age	1873	Listed	Yes – Grade II
Extensions	N/A	Facing Aspect	Northeast		
Wall Construction	The property is constructed of solid and possible cavity masonry	DPC	N/A		
Roof Covering(s)	Traditional pitched slate roof				
Ground Floors	N/A	Upper Floors	N/A		

5. Additional information

Solid masonry walls are a historic form of construction. While common, their use has been superseded by modern cavity walls (they started appearing between 1870 and 1901) and other contemporary construction types. Solid/timber external walls are prone to rainwater penetration and rely upon the integrity of the external finish for their weatherproofing. The principle is that the masonry will soak up rain hitting the wall. Provided that the wall is not too exposed and there is enough air movement, the water will evaporate before it penetrates completely through the wall.

Even in good condition, however, water penetration may occur during severe weather, particularly on southwest-facing elevations, due to the prevailing wind-driven rain affecting the UK. The thinner the walls are, the more vulnerable they are to penetrating dampness. Solid walls often contain concealed timbers, e.g. lintels above openings, and any timbers in contact with dampness will be prone to decay. Therefore, the external finishes of the walls must be maintained in good condition.

For **Bank House, Chippenham**, the Grade II listing has a significant influence on how dampness and repairs should be approached. As a late 19th-century limestone building, it was designed to manage moisture very differently from a modern cavity-wall structure.

The external walls are likely to be solid masonry, relying on **their vapour permeability to absorb moisture and then release it** through evaporation. This means that traditional materials, such as lime mortars and lime plasters, are generally the most compatible because they allow moisture to migrate through the wall and evaporate naturally. By contrast, modern dense gypsum plasters, sand/cement renders, or impermeable decorative finishes can trap moisture within the wall, increasing the risk of localised damp patches, salt crystallisation, plaster deterioration, and decay of embedded timbers.

When assessing dampness in a listed building like this, it is also important to recognise that **not all elevated moisture readings indicate a defect requiring remedial damp-proofing**. Moisture meters can respond to naturally conductive salts, dense masonry, or residual moisture, so findings should always be interpreted alongside the building's construction, ventilation, heating regime, and any visible symptoms.

Environmental conditions are equally important. If mechanical extraction is inadequate, particularly in kitchens or bathrooms, or if heating is intermittent, internal humidity can rise. Warm, moisture-laden air will then condense on colder external walls, especially in corners, behind furniture, and on north-facing elevations. This often produces localised dampness and mould that can be mistaken for penetrating or rising damp.

For a listed building, the preferred approach is usually to:

- Identify and rectify defects allowing excessive water ingress (such as defective rainwater goods, flashings, or pointing).
- Maintain vapour-permeable external finishes using lime-based mortars and appropriate permeable paints.
- Improve ventilation and ensure mechanical extract fans achieve suitable airflow rates.
- Encourage consistent background heating during colder months to reduce condensation risk.
- Use breathable internal finishes, typically lime plaster systems where repairs are required, rather than dense gypsum or cement-based materials.

From a conservation perspective, some seasonal or localised moisture within solid masonry is **normal** and often unavoidable. The objective is not to make the building completely dry in the modern sense, but to ensure that moisture can move, evaporate, and dissipate safely without becoming trapped. This philosophy helps preserve both the historic fabric and the long-term performance of the building.

As an independent damp and timber surveyor, I believe that a conservation-led assessment is generally preferable to specifying chemical damp-proofing or impermeable treatments unless there is clear evidence that they are genuinely required.

*The above processes and holistic thought must also be followed for like-for-like best-endeavour **timber repairs/replacement**, where required – in this instance, the **external timber gable end**.*

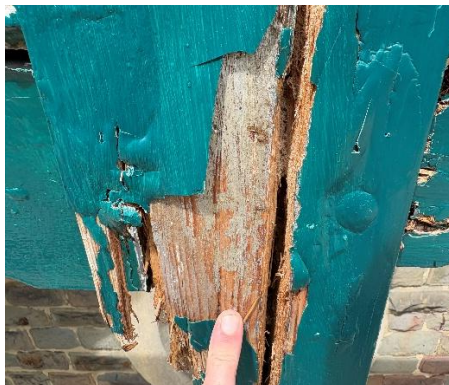
6. Observations

My assessment to conclude the timber species choice is as follows:

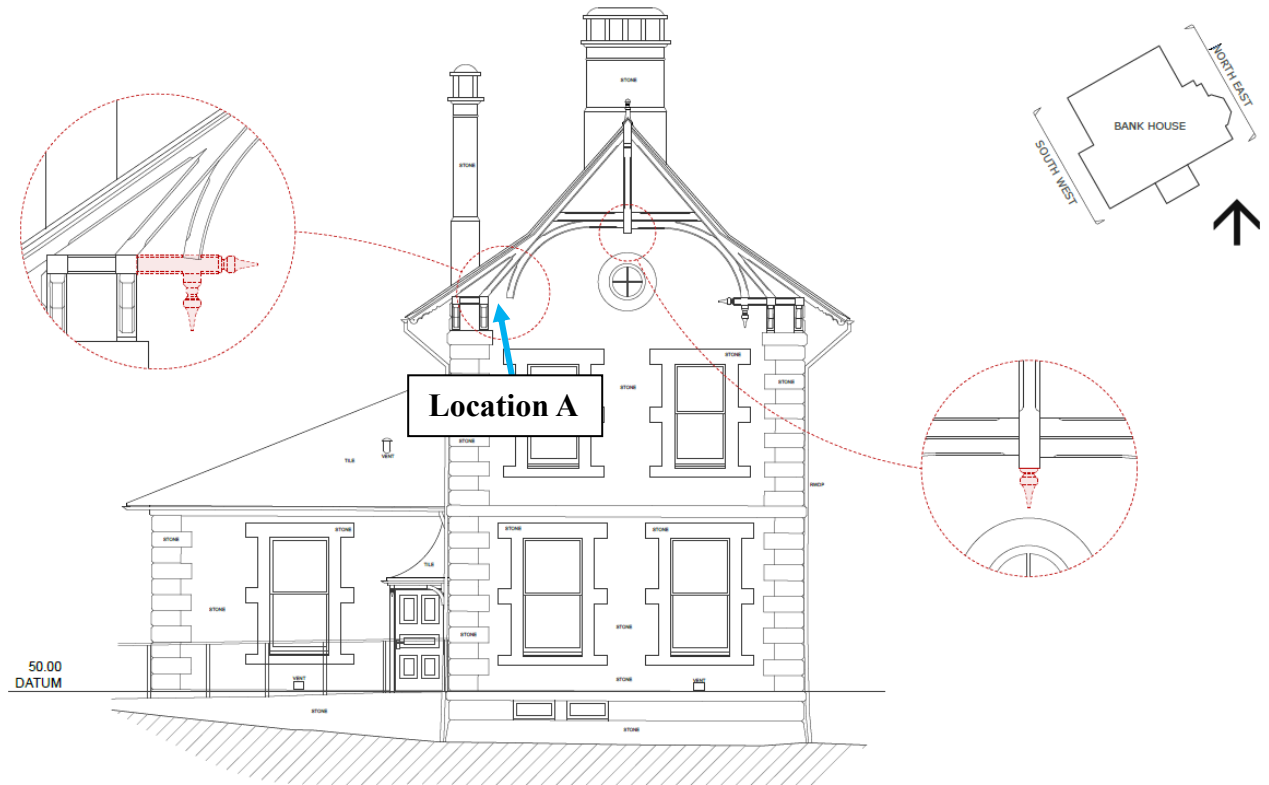
- The timber appears to be a **softwood**, rather than a hardwood.
- The visible grain and apparent growth ring spacing are most consistent with **European redwood (Scots pine)** or possibly **Baltic redwood**, both of which were commonly used for external joinery such as fascias, bargeboards and soffits in the UK, traditionally.
- It is **less likely** to be Douglas fir, larch or cedar, as I couldn't see the characteristic grain patterns or resin features associated with those species.

This species was **one of the most imported joinery timbers** used throughout the UK during the late Victorian period through to the late 20th century for items such as:

- Gate posts
- Porch posts
- Balustrades
- Fascias
- External mouldings
- Verandas



Locations identified as 'A' on the plan.



As shown in the photos below, this particular detail has decayed due to water ingress from wind-driven rain and timber joints opening over time, inviting unwanted moisture, resulting in the development of wet rot decay that has affected at least 30-40 per cent of the core of the main horizontal timber. *Wet Rot was the main rot type on all affected timbers.*



It is recommended that this detail be fully replaced with like-for-like timber (solid, if achievable; if not, well-laminated) and installed using hidden stainless steel screws, external glue/adhesive, accompanied by domino joints. All to be signed off by your consulting structural engineer.

The timber should be well primed and finished with oil-based paint or a similar external paint finish. A reputable joinery company versed in creating like-for-like period joinery is recommended to complete all required external timber repair works at this property.

The finials can be repaired by a joinery company (as mentioned). They will likely need to form a new cutter for their table routers to create a matching profile.



The missing pieces below can be formed with new cutters and put back together with external adhesive/glues, likely polyurethane, as this glue is stronger than the timber itself when cured.



Locations identified as 'B' on the plan

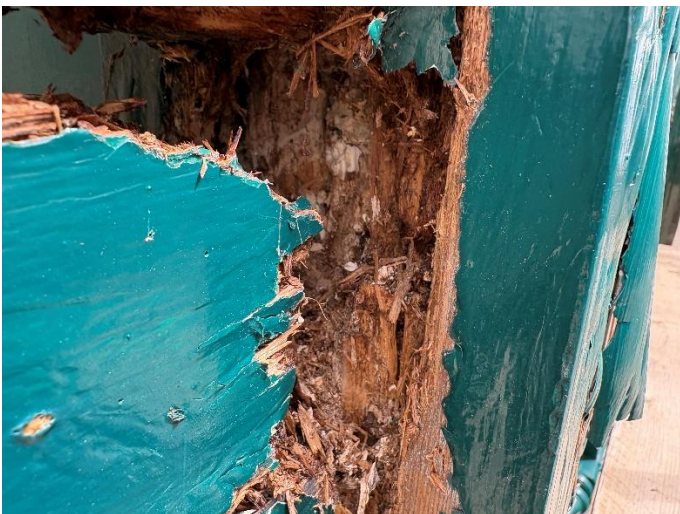


A replacement finial is required in this location, along with localised in-situ timber repairs as mentioned next within this report. Again, this should be fixed with domino joints and external glue/adhesives.

Localised in situ repairs as shown below.

The locations below require in situ repair, with the larger sections requiring cleaning back to sound timber, installing large sections of similar timber (possibly laminated) and then building out with structural mortar putty that can be moulded up to 1 m3 square and has the structural integrity of oak. The putty can then be sanded/planed back to suit, matched, and fully painted.

**Locations that require
timber 'build out' and
then structural
mouldable mortar putty
completion.**





Structural mouldable mortar putty.

MOULDABLE EPOXY MORTAR/PUTTY

An Ultra Low Disturbance
Building Solution

MOULDABLE EPOXY
HIGH BUILD FILLER PUTTY



DESCRIPTION

Mouldable Epoxy Mortar is putty-like high build filler which can be placed in virtually any thickness or shape, with zero shrinkage.

Mouldable Epoxy Mortar is epoxy putty, with proven structural strength and durability. It can be sanded, cut and drilled like timber. It is similar to Oak in hardness, when fully cured.

Features

- Mixes in equal parts
- Solvent and water free
- Can be moulded & shaped
- Workable like wood
- Absorbs surface stain/colour
- Working life: 5 - 10 minutes at 15 - 20 degrees C.
- Set time: 1-2 hours initial at 15 - 20 C, 7 days full cure

TYPICAL USES

For filling voids in wood and stone. For bonding timber, stone, plastics and metals (subject to preparation & with abrasion on some materials).

PREPARATION & METHOD

Cut out all rotted, loose or flaking material and vacuum to remove dust. Really thoroughly mix the two Mouldable Epoxy Mortar components in equal parts in gloved hands. Components must be used in equal parts or curing may be prevented. Do not mix more than you can use in 10-15 minutes. Wet your gloves with water to prevent the product from sticking. For hardwoods, (e.g. Oak, Elm), masonry, metals and plastics abrade the surfaces and remove dust. Firmly place the Mouldable Epoxy Mortar and pack into the void with a pallet knife or similar. Mixing & surface smoothing can be aided by using water containing a few drops of washing-up liquid. Shaping can be carried out with a knife whilst the material is damp & partially cured. Ensure that the temperature is well above 5 degrees Centigrade, or pre-warm the materials, otherwise mixing will be difficult and curing may be delayed. DCM/02/12

TECHNICAL DATA

Active Substance
BPF/BPA Epoxy Resins and Cycloaliphatic amine

Other Components

Inert filler aggregates

Mix ratio

Base: Activator = 1:1

Corrosion/aggressivity to other materials

No action/no known aggressivity

Compressive Strength - 40 N/mm²

Tensile Strength - 11 N/mm²

Flexural Strength - 30 N/mm²

Flexural Modulus - 3000N/mm²

Classification

Irritant and corrosive (un-cured components only)

Thickness/Volume

Unlimited thickness can be laid in one application. One litre makes 100x100x100mm.

Packaging

2 x 500cc pots = 1 litre mixed

Colour

Buff/Sand

Property Repair Systems - 01626 331351
Unit 3, Olympus Business Park, TQ12 2SN



Priming wood with Epoxy Primer. Mixing Mouldable Epoxy



Below are the smaller repair areas that will only require in-situ putty repairs, without the need for an initial laminated timber 'build out'.



Localised areas shown below require improved filling and repainting; again, the mouldable putty could be utilised in these areas.



I recommend contacting Property Repairs Systems to enquire about the Structural Mouldable Mortar Putty and to ask whether they have appropriate applicators/joinery companies available to quote for these works. [01626 872886](tel:01626872886) help@propertyrepairsystems.co.uk.

It is also important to ensure your Consulting Structural Engineer provides the final sign-off.

Moisture content.

For context, I undertook localised moisture readings, with mostly low-moderate values recorded, and localised pockets of elevated values adjacent to affected timbers.



The elevated readings should be reduced once the remedial timber repair works are fully completed.

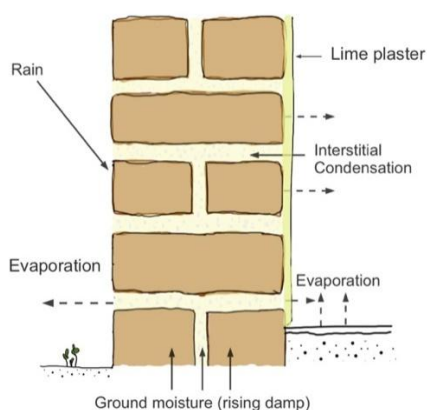
External Observations

As mentioned at the start of this report, properties of this type rely strongly upon the integrity of the external finish for weatherproofing. It is essential to understand that this is a traditional property of some age, built very differently from a modern structure. Structures of this age and construction instead rely on the nature of soft, absorbent materials used in construction to manage moisture, whether this be from the ground or the atmosphere. This is quite a different concept from modern buildings that utilise design elements such as cavity walls and damp-proof courses to keep moisture out.

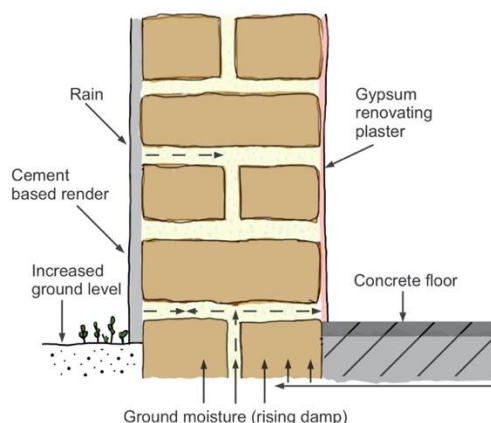
The main external walls are constructed from traditional materials, such as soft clay bricks, lime mortar, and renders. The porous nature of these mortars allows moisture to evaporate from within the walls. As the mortars are usually more permeable than the materials they bond to, walls often depend upon the evaporation of moisture from the joints to remain acceptably dry.

The main concept of a building of this type is that when the walls become wet or damp, the materials used should allow moisture to evaporate without restriction. A vital principle of a building of this age is 'vapour permeability', which describes how materials allow moisture to evaporate and pass through. The materials described above, such as lime mortars and renders, are highly permeable, allowing moisture in the form of liquid water and vapour to pass through them during evaporation.

The vapour permeability of a building can be compromised when modern materials are introduced during repair and maintenance, a common cause of dampness. The most common causes of dampness in traditionally built properties are inappropriate alterations and repairs. For example, cement-based mortars and renders are used instead of original lime products, gypsum renovating plasters on internal walls, and increases in ground/floor heights over time, as well as modern external masonry paints. Poor external maintenance is also a fundamental cause of dampness in all buildings.



Traditional wall construction – Basic moisture management principles.



Typical causes of dampness in solid masonry-built properties.

It did not rain at the time of my inspection, so I cannot comment on the weather tightness of the roof coverings or the rainwater goods. Gutters and downpipes can carry hundreds of litres of water during prolonged periods of rainfall. The joints and stop ends, as well as the outlets, are particularly prone to failure.

Leaves and other debris can easily block rainwater fittings, so they must be regularly checked for defects to prevent leaks and spillages. Rainwater spilling onto the external elevations can cause penetrating dampness, increasing the risk of fungal decay affecting any timbers built into them.

The slate roof is in satisfactory condition; however, a periodic property of this nature always requires seasonal maintenance/inspection on the external envelope.



Regular maintenance of the property's exterior is essential to ensure that it remains watertight. Failure to address defects allowing rainwater to penetrate the building fabric will increase the risk of fungal decay affecting the internal structural timbers.

This survey report is for the sole and confidential use of the client, and no liability will be accepted for third parties. Any person relying on the survey report does so entirely at their own risk.

My recommendations are based on the protocol outlined in the 'Joint Position Statement' issued in 2022 by RICS, Historic England and the Property Care Association, which clearly states that when investigating and dealing with damp-related issues, it is essential that the predominant source of the damp is identified and eliminated before considering what, if any invasive remedial work is required. The document recommends that surveyors provide a holistic diagnosis that identifies and addresses causes rather than focusing on symptoms and understand that dealing with dampness is often a staged process.

I hope you find the information in this report useful and that it helps you make an informed decision about how to proceed. Should you require any additional advice, please feel free to contact me via mobile or email, and I will be happy to assist wherever possible.

Yours Sincerely



SEAN ROONEY
Independent Damp & Timber Consultant
PCA Accredited Independent Damp & Timber Surveyor
CSRT CSSW

Enclosures:

Report
PCA Membership Certificate