

## **Item 7.b - Specialist 1**

Date: 9<sup>th</sup> October 2019

Ref:

Address: CUCKFIELD PARISH COUNCIL, THE QUEENS HALL, HIGH STREET, CUCKFIELD, RH17 5EL

Client: Caroline Hansen

Surveyor:

Date / Time of Survey: 7<sup>th</sup> October 2019 @ 11:30

Weather conditions: Dry and mild. There has been some heavy rainfall in the few days beforehand.

Dear Caroline,

Further to your recent telephone instructions received on 3<sup>rd</sup> October 2019, our surveyor has carried out an inspection for dampness on the North facing wall plus the cellar area.

We hope we have interpreted your instructions correctly; however, should this not be the case, please let us know immediately.

Our observations and recommendations are set out below based on the practical examination that was possible at the time of our inspection. All references to location are taken from standing outside the property facing the front elevation.

### **OBSERVATIONS:**

#### **External Observations**

The property is a Victorian grade 2 listed council building, with more recent additions to the rear. We would not recommend the installation of a secondary chemical DPC in a listed building, such as this one.

The external ground levels are very high in places along the right-hand flank (North facing wall). This means that part of the flank wall is effectively, partially below ground.

The gutters to the front part of the right-hand flank wall appear to be defective. There is water staining in various places to the external wall around the gutters here.

#### **Internal Observations:**

When surveying for damp problems in properties in almost all instances the surveyor will use a hand held "Moisture/Conductivity" meter. Its common name is a "Moisture meter" implying that it does in fact determine moisture levels however this is a misconception.

As stated, it is both a moisture and conductivity meter and reacts to both moisture and salts but, it cannot differentiate between the two. It is however more precise in timber. This means that when used on surface plasters and renders a positive reaction could be due to moisture, salts or both.

In conclusion therefore it can only be used as a tool of indication and is inconclusive meaning the results cannot be relied upon and further investigation and observations are necessary to determine the true cause of any positive readings.

The pattern of positive readings plays a major part in diagnosis for example, if positive readings were restricted to a localized band of plaster 300mm wide at the base of the wall extending 1m upwardly the most likely cause would be something like a defective external downpipe allowing localized water penetration. Observations externally would confirm or deny this.

Localized positive readings would normally be caused by something other than rising damp due to damp proof course failure.

In conclusion therefore on-site analysis is based upon observation, knowledge, experience and expertise.

My test procedures included the use of an electronic moisture/conductivity meter in both conductive (pins) and capacitance (radio frequency) modes.

The moisture/conductivity meter when used in masonry or plaster provides moisture equivalent readings of dampness (wme). Conductivity pins used on masonry or plaster surfaces will give an indication whether or not

the surface has reached a satisfactory equilibrium and is air dry or damp. A capacity pad works on radio frequency and will measure beneath the wall surface to an approximate depth of 10mm giving an indication as to moisture content within the masonry.

**High moisture meter readings** were recorded to the base of the right-hand flank wall (front section), from the utility cupboard up to the double doors. The plaster and skirting board are degraded in this area.

High moisture meter readings were recorded at both high- and low-level areas to the right-hand flank wall (rear section opposite the doors to the hall).

High readings were recorded above the front door in the porch area.

There is surface water to parts of the cellar floor. The cellar walls are damp in places. The cellar is and always will be damp unless it has been waterproofed in order to provide a dry habitable environment. In its current state it is only suitable for the storage of non-perishable items. I have not quoted for waterproofing the cellar in this report.

There are several gullies set into the floor of the cellar plus there is an aged sump pump set into the floor. The sump chamber was half full of water and the surface water is not draining away to the gullies very effectively. There is an ongoing plumbing leak in the plant area of the cellar.



Front section, North facing wall.



Rear section, North facing wall, opposite the doors to the hall.



Sump pump in the cellar floor, half full of water.



Surface water and gully in the cellar.



Damp around the front door in the porch area.

## **RECOMMENDATIONS:**

### **Proposed works by others:**

Ensure that the gutters along the right-hand flank wall are defect free.

Inspect and rectify all plumbing defects in the cellar.

### **Proposed works by specialist**

Damp proof the two sections of wall on the North facing flank, plus above the wall panelling and up to the surface mounted cables on the front elevation wall in the porch.

This will involve carefully removing the skirting boards on the North wall and either setting aside for re-fixing if they are sound or replacing on a like for like basis if they are badly degraded.

We will then hack off the damp degraded plaster work, taking back to the masonry.

We will then apply a specialist moisture and salt resistant membrane to the exposed masonry using a cement, polymer adhesive.

Once this has cured, we will apply a bonding base coat to the membrane, before a final plaster skim coat to match the existing.

We will re-instate the skirting boards.

We will remove all rubble from site.

We would carry out the above  
**FOR THE SUM OF £3340.00 + VAT.**

NOTE: Our quote allows for replacing plaster to a maximum thickness of 25mm. If dubbing out is required, you will be advised of any extra cost before we proceed.

**N.B** This quotation does not include painting and decorating. We would also like to mention that there **will** be hairline and thermal cracks appearing on the new plaster work due to the drying process. This is not a sign of failure and perfectly normal. We would therefore advise that you leave the plaster to dry for a minimum period of 28 days before you decorate. When hairline cracks do appear, a standard fine filler crack repair is perfectly adequate to cover them.

### **The cellar - pump**

We would recommend removing and replacing the aged sump pump with a: Sentry Twin Pump– Includes two Ama-Drainer 303 pumps and a dual power alarm. Designed for use in situations where a higher level of water ingress is anticipated or where additional backup is required. Dual outlet pipes allow both pumps to operate at full capacity.

We would also recommend installing a battery back-up system.

The UPS 3000 Battery Back-Up System is an on-line double-conversion Uninterruptible Power Supply (UPS) offering the highest levels of resilience and protection. This provides power to one of the submersible pumps in case of a loss of mains power allowing for continued pump operation.

All electrical connections will be carried out by a qualified electrician.

We would carry out the above  
**FOR THE SUM OF £4410.00 + VAT.**

### **The cellar - floor**

You should also consider improving the drainage on the cellar floor to ensure that free water is taken away to the existing gullies and sump pump, rather than just pooling on the cellar floor.

To improve the drainage we would recommend cutting into the existing concrete slab and installing Aquadrain drainage channels around as many of the perimeter cellar walls as is possible (there is a stud wall and some plant equipment that may limit this) and across the floor as necessary, to either the existing gullies or to the sump pump. The channel would be set into the floor to improve the drainage in the cellar. See example of the drainage channel below.



We would carry out the above  
**FOR THE SUM OF £4780.00 + VAT.**

### **BUILDERS WORKS - GENERAL**

The following works should be carried out by your builder under separate contract: -

- (1) Inspect all pointing, brickwork and external rendering, making good where necessary.
- (2) Remedy any Penetrating Dampness anywhere in the property.
- (3) Check all rainwater goods, gutter, downpipes etc., and repair as necessary.
- (4) Ensure that external ground levels are below the internal floor levels and Damp-Proof Course.
- (5) Inspect all internal plumbing and make good where necessary.
- (6) Open up cavity walls and clear of any debris.
- (7) Check and renew as necessary the lead flashing to the chimney stacks and fit appropriate cowls to prevent rainwater descending the chimney.

## **NOTES**

- a) We have not inspected any timbers which are currently covered, unexposed or inaccessible, nor have we inspected any parts of the premises other than those listed. We are therefore unable to report on the condition of any such other parts, or to provide an indication as to whether, or not, they are free of infestation, rot or dampness.
- b) Wood rot and dampness problems in buildings are frequently caused by inadequate external maintenance. Potential problem areas that clients are recommended to have checked separately before buying and thereafter on a regular basis are chimneys, flashings, roof valleys, flat roof coverings, gutters, down pipes and drains, render coatings, exterior woodwork and pointing of brickwork. Where any of those are found to be defective the client should arrange to have them repaired as quickly as possible by a reputable building contractor. Any timbers immediately adjacent to, or in contact with, damp wall masonry should be checked when suitable access is available.
- c) Unless otherwise agreed in writing, it is the responsibility of the client to ensure that the areas recommended for treatment are cleared of all portable furniture, floor coverings and items of personal property prior to the commencement of the work. We regret that no responsibility can be accepted for any damage or breakages that may occur, however occasioned, through the work areas not having been cleared in advance. **N.B.** An extra charge will have to be made if our Operatives are required first to clear the work areas.
- d) A source of tap water together with a 13-amp power supply is required for the duration of the work. We should be given at least one week's notice if there is no water or electricity available to enable us to make alternative arrangements. An extra charge of £100.00 per day, plus VAT, will be made if we are required to provide a suitable electrical generator. Unless otherwise informed in writing before the commencement of any work it will be presumed by us that all electrical circuits and installations within the treatment area(s) are safe and in good order.

Our Ten-Year Guarantee will apply to above ground damp proofing treatments carried out by our Operatives in accordance with the foregoing specification. The Guarantee Certificate will be issued on completion of the work following full settlement of the account.

## **SPECIAL NOTE**

In addition to our Guarantee, as we are members of the Property Care Association (formerly known as the BWPDA), we are pleased to be able to offer you a Guarantee Protection Trust Ltd (GPI) back-up Guarantee. The premium for this is a single payment of **£ 85.40**. This cover protects you and subsequent owners of the property should this company cease trading in the next ten years.

This report is for the sole use and benefit of the party to whom it is addressed, and no responsibility is accepted to any third party for the whole or any part of its contents.

We have not inspected those parts of the property which are covered, unexposed, or otherwise inaccessible and, as indicated, this report does not represent a full structural survey.

We thank you for inviting our company to carry out an inspection on your behalf, we hope that you found the content of our report easy to understand, however, if there is any part that you would like explained in greater detail please telephone the surveyor concerned.

We have pleasure in enclosing our estimate to carry out the treatment work proposed and naturally hope that you will instruct our company to undertake this work. To accept our estimate please complete the enclosed Acceptance of Estimate form and return it to our office by post or email (by signing this you are accepting our Terms & Conditions and Client's Responsibilities). Upon receipt, our contracts manager will contact you to arrange a mutually convenient date for the work to take place.

Should you have any further queries at this stage, please do not hesitate to contact our offices.

Yours sincerely,

**XXXX CSRT, CSSW, CSJK**

**Surveyor/Operations Manager**