



# Rotorgraph

## Roof Inspection Report

In respect of:

Barkisland Mill

Beestonley Lane

Barkisland

Halifax

HX4 0HF

Report produced by Simon Hollis MRICS

For and on Behalf of Rotorgraph Surveys  
Limited

21<sup>st</sup> September 2023

## Drone Inspection Report - Summary of Findings



Barkisland Mill

## Table of Contents

|       |  |    |
|-------|--|----|
| 1.0   | About this Report.....                               | 4  |
| 1.1   | Address of the Property Surveyed (The Property)..... | 4  |
| 1.2   | Brief and Report.....                                | 4  |
| 1.3   | Date of Inspection .....                             | 4  |
| 1.4   | Client .....   | 4  |
| 1.5   | The Surveyor .....                                   | 4  |
| 1.6   | Roofing Terminology .....                            | 5  |
|       | Roof Recovering .....                                | 6  |
|       | Pitched Roofs.....                                   | 6  |
|       | Mortar.....  | 6  |
|       | Brick and Stone Repairs .....                        | 7  |
|       | Paints .....   | 7  |
| 2.0   | Observations and Recommendations .....               | 8  |
| 2.1   | Roof Covering and Detail .....                       | 9  |
| 2.1.1 | One - Left-hand Tower .....                          | 10 |
| 2.1.2 | Two - Centre Tower .....                             | 13 |
| 2.1.3 | Three - Right-hand Tower .....                       | 15 |
| 2.1.4 | Four - Front Pitch .....                             | 17 |
| 2.1.5 | Five - Centre Front Pitch .....                      | 23 |
| 2.1.6 | Six - Centre Rear Pitch.....                         | 28 |
| 2.1.7 | Seven to Twelve - Rear Pitch and Dormers .....       | 32 |
| 2.2   | Guttering .....                                      | 34 |
| 2.2.1 | Front Gutter .....                                   | 34 |
| 2.2.2 | Valley Gutter .....                                  | 38 |
| 2.2.3 | Rear Gutter .....                                    | 39 |
| 2.3   | East Gable Wall .....                                | 41 |
| 2.4   | West Gable Wall .....                                | 42 |
| 2.5   | Coping Stones.....                                   | 47 |

Signature:



For and on behalf of Rotorgraph Surveys Limited

Date of Report: 21<sup>st</sup> September 2023

## 1.0 About this Report

### 1.1 Address of the Property Surveyed (The Property)

Barkisland Mill  
Beestonley Lane  
Barkisland  
HX4 oHF

### 1.2 Brief and Report

Instructions were received from the Site Manager to attend the property and undertake a drone inspection of the gable end, roof covering and guttering. Following the inspection, this report has been prepared based on the imagery taken whilst on-site. This report details our general opinion of the condition of the roof covering. Unless specifically agreed in the Scope of Services the technical design of the roof elements, falls, fire compliance and wind loading calculations do not form part of this instruction. Plant and other rooftop elements are excluded from the inspection and the inspection and report should not be considered a full building survey.

We hope that the report helps you to make a reasoned and informed decision on any required repairs and maintenance. We detail the prioritisation of works in our Observations and Recommendations section (2.0). The information and recommendations detailed in this report are provided in good faith based on current best practices and experience, this is not intended to form any kind of guarantee. Where works are recommended, you should obtain detailed written quotations and establish design liability before you enter into a legal commitment. Where products are recommended, others will likely be available. If you decide not to act on the advice in this report, you do so at your own risk.

We have not been instructed to advise on repair methodology, prepare schedules of work, prepare tender documents or provide project management advice, however, if you would like to discuss any of these services, please do contact us.

### 1.3 Date of Inspection

The property was inspected by Rotorgraph Surveys Limited on 20<sup>th</sup> September 2023. The weather conditions at the time of the inspection were fine and dry.

### 1.4 Client

This survey report and any associated correspondence are for your personal use only and no responsibility can be or will be taken to others who may see it or wish to depend on it.

### 1.5 The Surveyor

On behalf of Rotorgraph Surveys Limited, the site inspection survey was undertaken by Gary Brown.



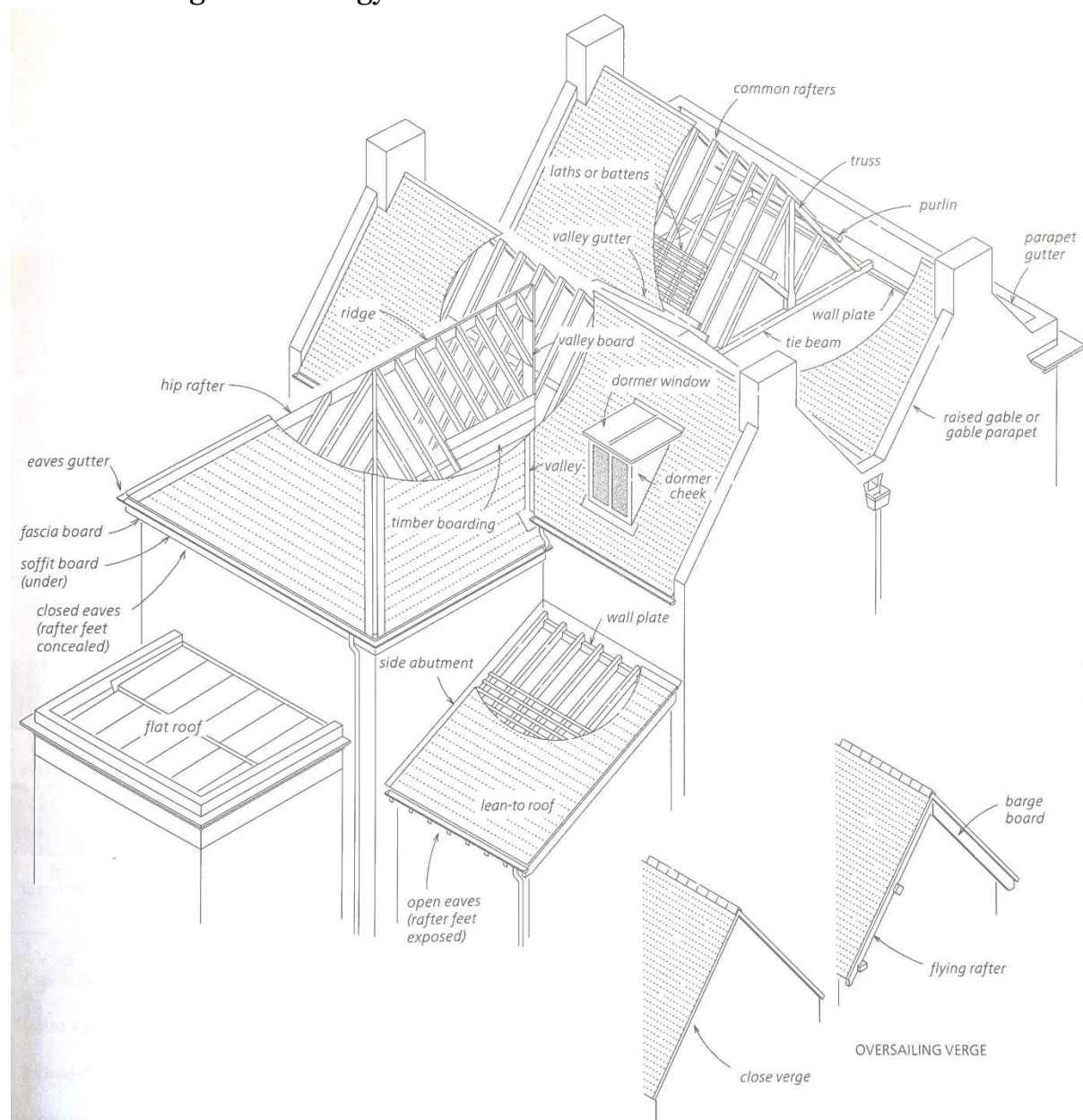
This inspection report was prepared by Simon Hollis based on the imagery taken on-site.

Simon holds a HND in Estate Agency, a Bachelor's with Honours degree in Urban Land Economics, a Master's Degree in Building Surveying and is a Member of the Royal Institution of Chartered Surveyors.

Simon is Dyslexic, please excuse any spelling or grammar errors in this report. Specialist software is used, unfortunately, it is not as clever as the developers would have you believe.

The Surveyors declares no conflict of interest in inspecting this property.

## 1.6 Roofing Terminology



Roofing Terminology. Credit: English Heritage

## Roof Recovering

Where recommendations are made for a replacement covering, the manufacturer/installer should provide a detailed specification along with comprehensive drawings, u-value calculations, a condensation risk analysis, wind uplift calculations and a fixings specification and layout. The manufacturer should be able to supply a list of approved contractors to undertake the work and monitor the installation through on-site visits to confirm that the works undertaken meet their specifications and are undertaken to the appropriate standards of workmanship. If the manufacturer does not offer this service, we recommend that the project be managed by a suitably qualified independent professional.

When planning a roof recovering, any plant, roof accessways and penetrations need to be considered from the outset as they must be properly planned for.

Where more than 50% of the roof coverings are replaced, compliance with current building regulations will be required.

To comply with BS:6229, the roof needs to be inspected at least every 12 months or, as per the manufacturer's warranty provision.

## Pitched Roofs

The minimum fixings requirements of BS 5534 need to be achieved by the contractor together with any manufacturer-specific requirements bearing in mind wind uplift resistance data for the site.

All leadwork needs to be installed to the Lead Sheet Association guidance.

## Mortar

Mortar should always be sacrificial to the stone/brickwork/slates/tiles. In practice, this means that the mortar mix should be softer than the stone/brickwork/slates/tiles and be the point of any failure. Your mason must make the final decision on the specification of the mix as they will ultimately be responsible for the success of the job (liaison with the Conservation Officer may be required if the building has statutory protection).

Where we advise that works are required to pointing/flaunching/roof detail, unless otherwise detailed, a non-hydraulic lime (e.g., CalBux 90) should be used as the binder in the mix together with the appropriate aggregate for the job and local area (and the addition of a pozzolan, if required). For small repair works, a pre-mix could be considered, however for larger jobs and rendering, the mix should be mixed 'hot' on-site. The use of lime-based materials requires a detailed understanding of the site, the weather and atmospheric conditions, the type of masonry/brickwork, locally available limes, locally available aggregates and their grading/void ratios and suitable preparation of the substrate and finished detail.

For very specialist works and works to statutorily protected buildings, analysis of the existing and original mortars should be carried out so that the appropriate specification can be determined.

Unless specifically detailed in the report, cement (and its variants) should not be used as the binder in the mix. Hydrated, sometimes referred to as 'builders' lime' is also not appropriate to use to make mortar/render for traditional buildings.

Cementitious mortars and renders can cause several problems with traditional buildings. They are very hard and brittle so often crack when traditionally constructed buildings move with the seasons. These hairline cracks then allow rainwater to penetrate the mortar joints/render and accelerate the effects of freeze-thaw weathering and create problems with penetrating dampness. This moisture can also cause decay/insect attack to any timber that is socketed into/bearing onto the walls e.g., battens, joists, beams, lintels and sills.

As well as being hard and brittle, cementitious mortars are impermeable/significantly less permeable than lime-based mortars. In practice, this means that any moisture that makes its way into the structure is unlikely to be able to escape through the external leaf and if/when it does, it is likely to have to escape via the stone/brickwork and not through the mortar joints. This will place additional moisture stress on the stone/brickwork and likely accelerate decay.

When undertaking pointing repairs/re-pointing, the existing mortar should be removed by hand with a plugging chisel and lump hammer or an Arbourtech Allsaw. Angle grinders, SDS drills, mortar rakes, Kango hammers etc. should not be used as they will likely damage the stone/brickwork leading to repairs being required before the re-pointing works begin. Existing pointing needs to be removed to a depth of at least 25 mm or twice the width of the joint, whichever is greater (ashlar and fine brick pointing will need to be approached on a case-by-case basis and may require grouting as opposed to pointing).

### Brick and Stone Repairs

Brick and stone repairs should only be undertaken by specialist craftspeople using specialist materials. Using mortar to make surface repairs to stone and brickwork is not an acceptable method.

For localised repairs, a proprietary repair product should be used and can be tooled and pigmented to match the existing elevations. We have recently used Masons Mortar based in Glasgow which supplies a range of suitable products for most repair scenarios.

For larger repairs, stone/brick rotation or replacement stones and bricks may be needed. These should be like-for-like in terms of performance and aesthetics.

If the building has statutory protection, further investigation and a more detailed specification will be required for Listed Building Consent.

### Paints

Traditional paints for timber would have been based on white lead or linseed oil. Both of these are long-lasting and permeable. More recently, plastic-based paints have become the norm. Plastic-based paints are impermeable and can trap moisture beneath the surface accelerating the decay of the substrate. We do not recommend that plastic-based paints are used anywhere, instead, we recommend you consider the following:

Render/external areas (not made from timber) – limewash (homemade or pre-mixed), clay-based paint or mineral-based paint.

Timber – linseed oil-based paint.

When researching/purchasing paint, we recommend that you purchase paint with the lowest SD (diffusion) value for the colour/type of paint you need. Limewash is the most permeable finish and has an SD value of 0.01.

## 2.0 Observations and Recommendations

Our observations are made as if stood at the front of the block in the car park. We have worked left to right across the building and tried to include reference points in the photos where possible.

We only see the property during the course of one day in one season, usually only in one weather condition. It, therefore, may be necessary for you to observe and monitor some items.

When we note that works are required, we will usually advise that these are required:

Straight away – works should be undertaken without delay to stop the defect from having an immediate detrimental effect on the property.

Short-term - within the next year.

The short to medium-term – end of the first year to year five.

Long-term – post year five.

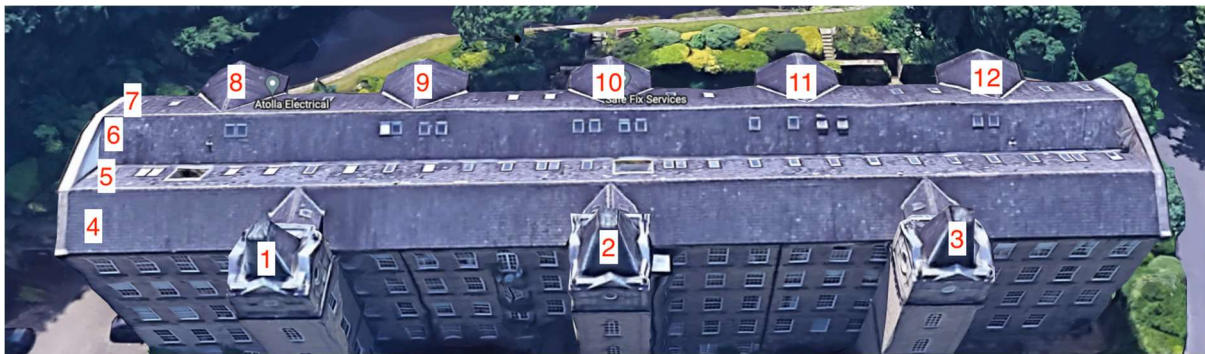
Record and monitor – photograph/measure the defect and check it with the change in seasons to see if it gets any worse. If it does get worse, further action may need to be taken.

### Limitations to our Inspection

The roofs and guttering have only been inspected from ground level with the use of a drone, we have been unable to physically get close to the roof coverings etc. We have detailed our findings below; however, this should not be considered a full building survey and where there are multiples of the same defect, we have included examples.

## 2.1 Roof Covering and Detail

The main roof covering is natural slate and the areas referred to are as per the plan below:





## 2.1.1 One - Left-hand Tower

General comment, all towers – the ferrous metalwork needs to be suitably prepared and re-decorated.

There are corrosion stains on the slates and lead details below.



General comment, all towers – the lead hip details are fixed into place with mechanical fixings. This detail is incorrect, a central fixing and restraint straps should have been used.

The lead should be monitored for tearing.

General comment, all towers – the build-up of algae should be killed and removed.

The slates are generally heavily pollution-stained.



General comment, all towers – there is little room for expansion and contraction of the leadwork around the wall heads/parapets.

These should be monitored for tearing.



General comment, all towers – areas of lead have been coated with waterproofing-type paint. This is not an appropriate long-term solution and if there are defects with the leadwork, these should be appropriately patch-repaired or bossed.



General comment, all towers – there are areas of lead that are oxidising as patination oil has not been applied to the surface of the lead.

We recommend the surface is suitably prepared and patination oil is applied next time high-level works are undertaken.



General comment – all flat roof areas – these areas have been incorrectly detailed with several pieces of lead that have been bossed (welded) together.

These should have been detailed with two or more sheets joined with a mop stick detail.



Right-hand pitch – the missing slate should be replaced in the short-term.




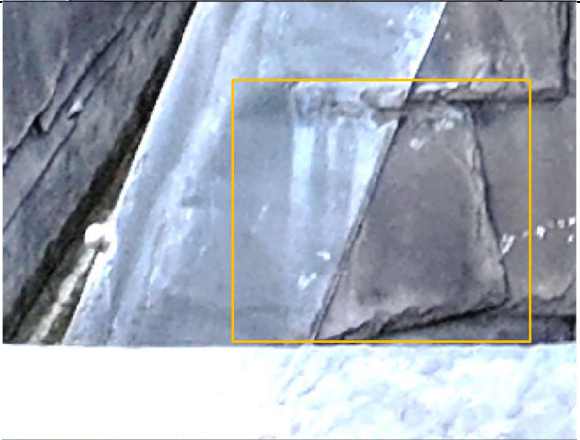

Rear pitch – the slipped slate should be re-affixed in the short-term.





## 2.1.2 Two - Centre Tower

See the comments above that apply to all towers.

|   |  |
|---|--|
| <p>Left-hand pitch – the slipping slate should be re-affixed in the short-term.</p>                     |    |
| <p>Left-hand pitch – the slipping slate should be re-affixed in the short-term.</p>                     |   |
| <p>Right-hand pitch – the cover flashing is coming away and should be re-affixed in the short-term.</p> |  |

The lead hip detail has been stuck down to the slates with a mastic-type product. This is inappropriate and a lead restraint strap detail should have been used.

Consideration should be given to adding a restraint strap to the hip details.



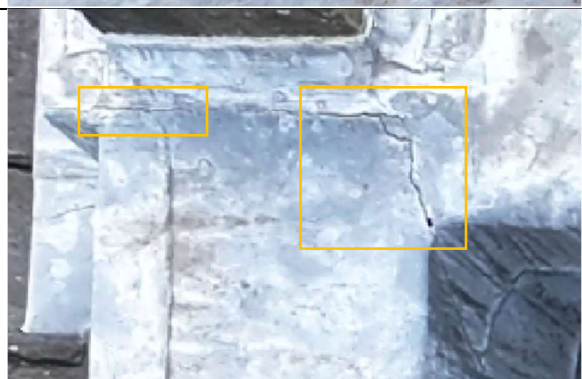
Rear pitch – the chipped slate should be replaced in the short-term.



Rear pitch – the slipping slate should be re-affixed in the short-term.



Parapet wall, rear right-hand corner – there appear to be two areas of tearing in the lead – these should be repaired as soon as possible.





### 2.1.3 Three - Right-hand Tower

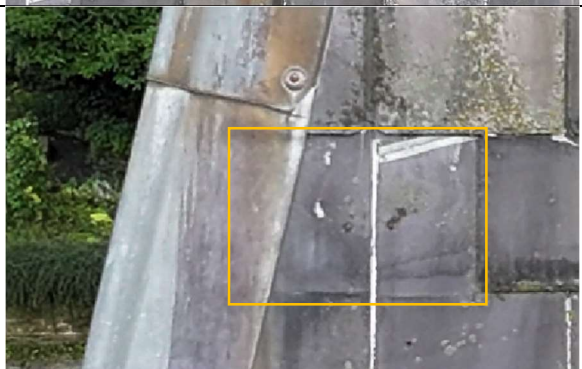
See the comments above that apply to all towers.

General comment – many of the slates have been bedded in/sealed with a mastic-type product.

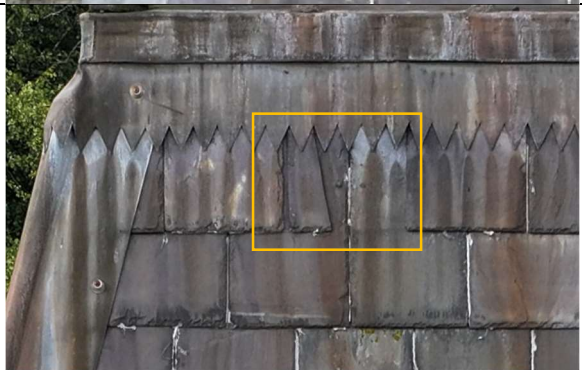
This is inappropriate and these areas should be monitored for failure going forward.



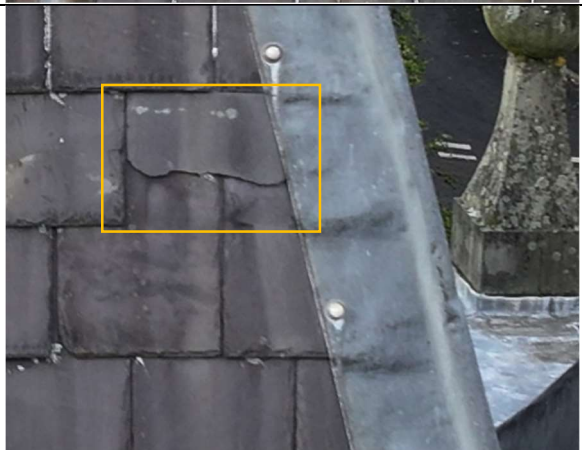
Right-hand pitch – the missing slate should be replaced in the short term.






Rear pitch – the missing slate should be replaced in the short term.



Rear pitch – the cracked slate should be replaced in the short term.



|  |  |
|--|--|
| <p>Parapet wall, rear elevation – the lead has split.</p> <p>We recommend that this is repaired as soon as possible.</p> |    |
| <p>Box guttering – this should be cleared of debris.</p>   |   |
| <p>Box guttering – there is ponding near the outlet. This should be checked for debris and emptied.</p>                  |  |



## 2.1.4 Four - Front Pitch

Ridge – there are areas of cracking to the ridge pointing and moss is beginning to build up. The ridge will likely need to be re-pointed in the next couple of years.



Ridge, left-hand section – the broken tile should be replaced in the short-term.







Pitch, left-hand section – the cracked slate should be replaced in the short-term.



Eaves, left-hand section – the broken tile should be replaced in the short-term.



|  |  |
|--|--|
| <p>Left-hand section, tower section – the slipping slates should be re-affixed in the short-term.</p>  |    |
| <p>Left-hand section, tower section – there is no guttering at the eaves of this section. This may be acceptable if the slates projected further, however, they do not.</p> <p>There is not a particularly easy way to address this, a lead detail is likely the most economical option.</p> |   |
| <p>Centre left section, tower section – the cracked and damaged slate should be replaced in the short-term.</p>  |  |
| <p>Centre left section, tower section – the soaker detail should be directed into the end of the guttering.</p>  |  |

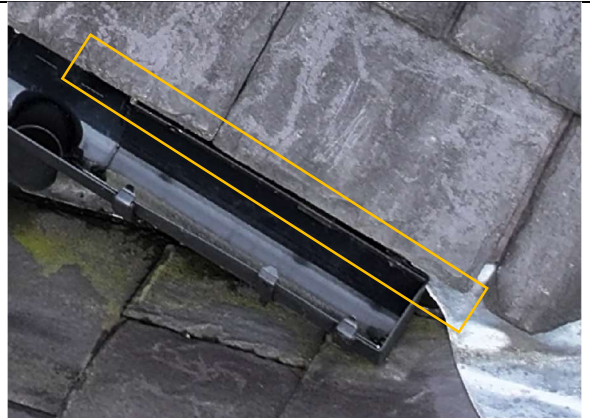


Centre left section, tower section – the slipped slated at the eaves course should be re-affixed as soon as possible.



Centre left section, tower section – the slates toward the valley do not sit over the guttering, likely as the guttering channel is too deep to fit under the eaves course.

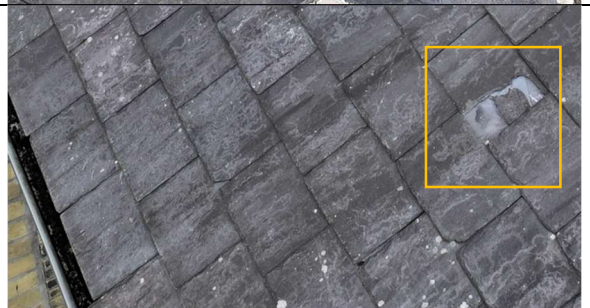
This needs to be corrected, a worked lead slip is likely the most economical solution to this.







Centre left section, tower valley – the slipped slate should be re-affixed in the short-term.

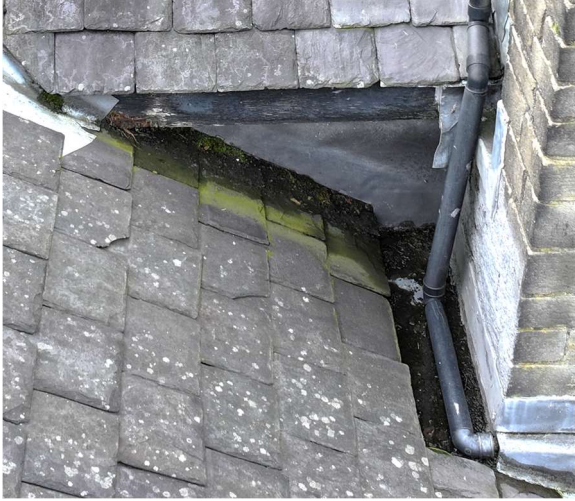





Centre left section – the damaged slate should be replaced as soon as possible.







|  |  |
|--|--|
| <p>Centre left section – the slipping slate at the eaves should be re-affixed as soon as possible.</p> |    |
| <p>Centre left section – the chipped slate should be replaced in the short-term.</p>                   |   |
| <p>Centre left section – the cracked ridge tile should be replaced in the short-term.</p>              |  |
| <p>Centre left, tower section – the damaged slates should be replaced in the short-term.</p>           |  |

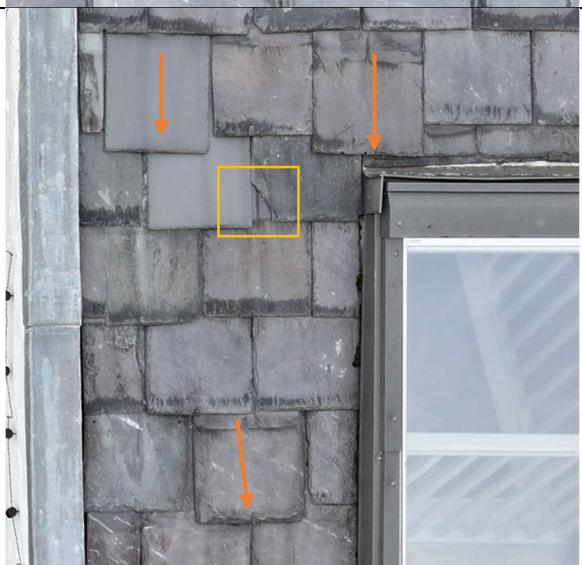
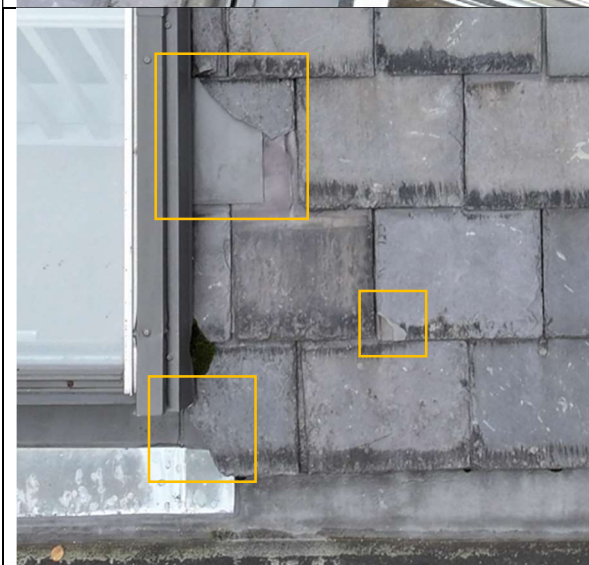
|   |  |
|---|--|
| <p>Centre left, tower section – the fascia is decaying and a plan should be made to replace it.</p> <p>The detritus around the wall head and box guttering should be cleared away in the short term.</p> <p>The lead valley is torn at the bottom and should be replaced/repaired.</p> <p>The fall pipes do not form part of this instruction, however, we noted that there was only one pipe clip holding on all of the sections of the fall pipe here. We recommend additional pipe clips be added in the short term.</p> |    |
| <p>Centre-right, tower section – the slipping and damaged slates should be replaced in the short-term.</p>  |   |
| <p>Centre-right, tower section – there is no guttering on the tower section and the fascia looks to be in very poor condition and will likely need replacing in the next year.</p>  |  |
| <p>Centre-right, tower section – the walls do not form part of this instruction, however, painting them with waterproofing paint is wholly inappropriate and will likely cause accelerated decay of the stone below.</p> <p>The eaves detail above should be suitably re-designed to correctly discharge rainwater to the main gutters.</p>   |  |



|  |   |
|--|---|
| <p>Centre-right, tower section – the damaged and missing slates and tile should be replaced in the short-term.</p> |  A photograph of a roof section featuring a central skylight. Three yellow rectangular boxes are overlaid on the image to highlight areas of roof damage: one box is on a missing slate directly above the skylight, another is on a damaged slate to the left of the skylight, and a third is on a damaged slate at the top right edge of the frame. |
| <p>Right-hand side, tower section – there is no guttering on either side of the tower section.</p>                 |  A photograph showing the right-hand side of the roof where it meets a brick wall. The roof surface is severely damaged, with several slates missing, exposing the underlying wooden batten and waterproofing. There is no guttering visible on either side of this section.  |

## 2.1.5 Five - Centre Front Pitch

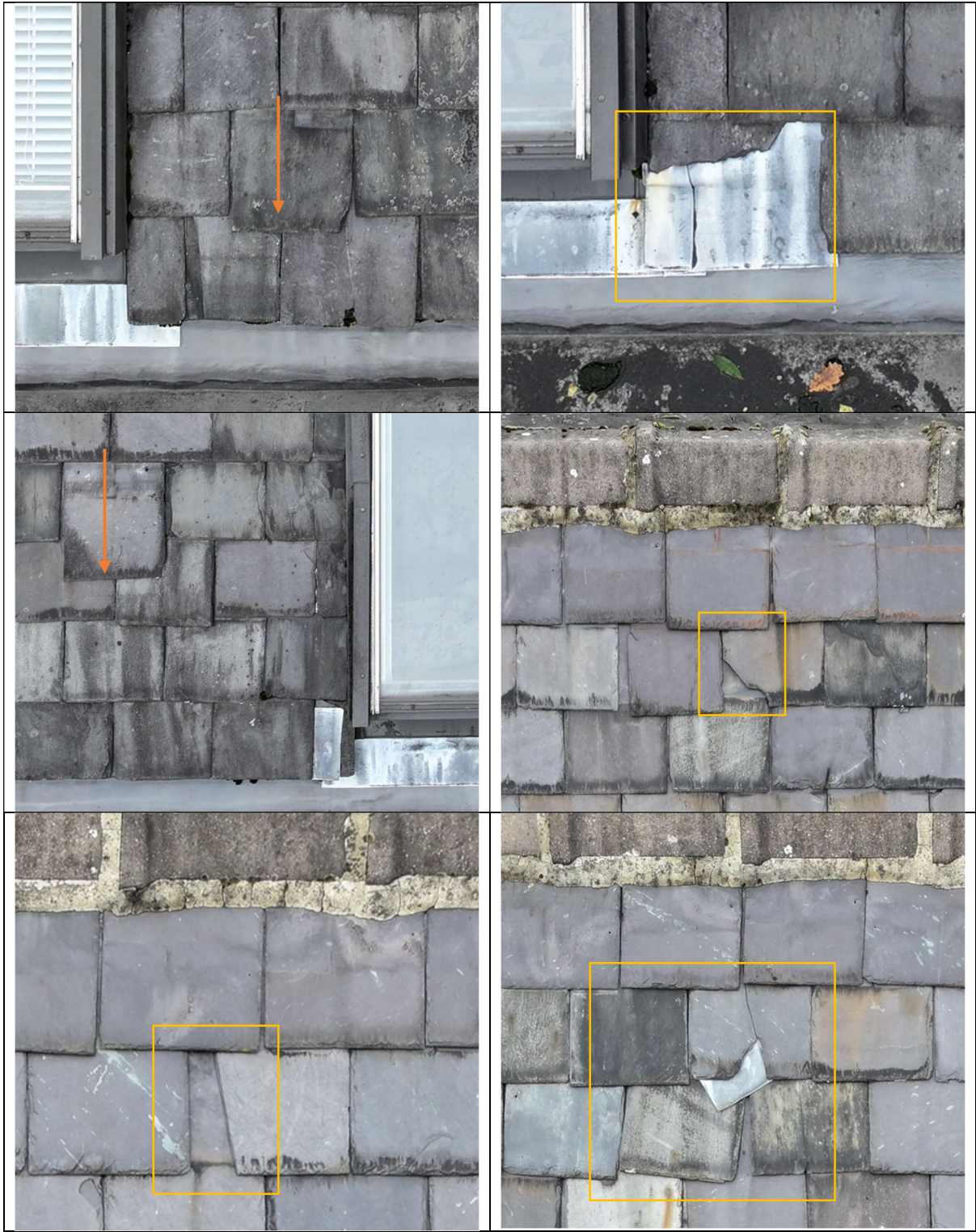
The damaged and slipping slates should be replaced in the short term. We have included photos of the areas of concern below. The photos run left to right and we have marked damaged slates in yellow boxes and slipped slates with an orange arrow.







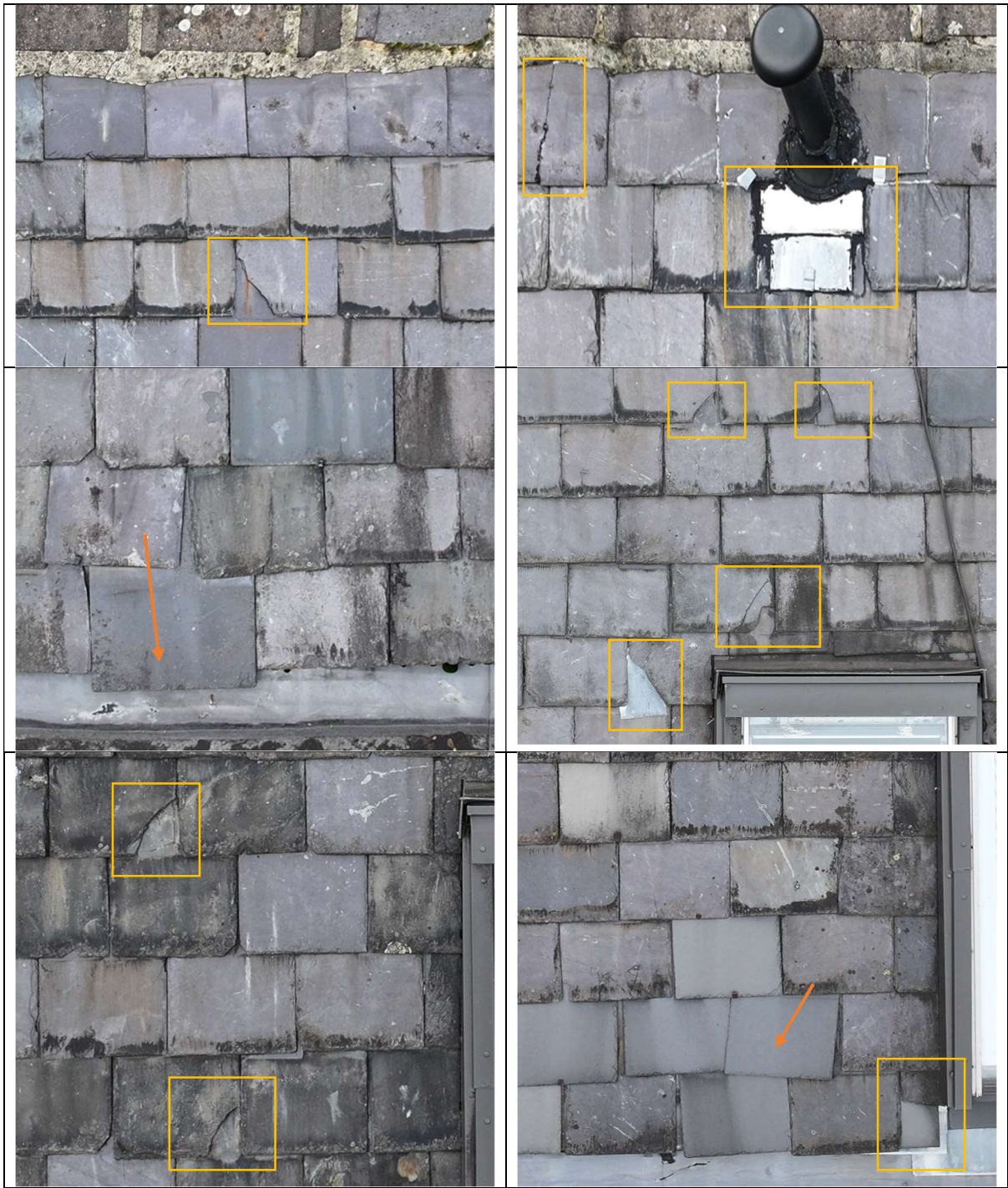














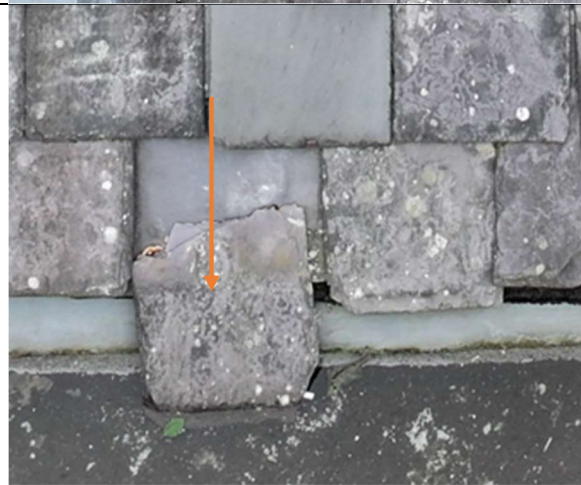
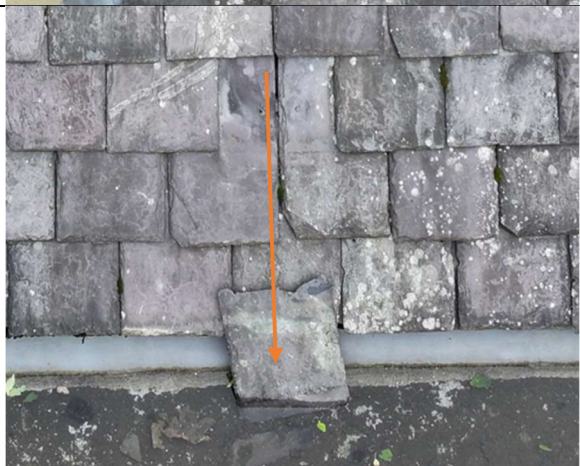
## 2.1.6 Six - Centre Rear Pitch

The ridge pointing is in poor condition and will likely need to be raked out and repointed in the next year.



All of the damaged, chipped, slipped and missing slates should be replaced in the short term. Matching slates should be used.

The photos run from the left-hand side to the right-hand side.















## 2.1.7 Seven to Twelve - Rear Pitch and Dormers

The ridge pointing is in poor condition and will likely need raking out and repointing in the next year.



All of the damaged, chipped, slipped and missing slates should be replaced in the short term. Matching slates should be used.

The photos run from the left-hand side to the right-hand side.











2.2 Guttering

Limitations to our Inspection





We do not perform or comment on rainwater goods design calculations or test installations. At the time of our inspection, the weather was dry and we were unable to observe the functionality of the rainwater goods. You should observe the fittings during heavy rainfall and repair any leaks as soon as possible.

2.2.1 Front Gutter

Photos and comments are made viewing the guttering from left to right.

|  |  |
|--|--|
| General comment – there is ponding along the guttering runs. The debris should be cleared and the fall checked and adjusted if needed. There are some example photos of the debris build-up and ponding below. |  |
|   |  |
| General comment applicable to all guttering sections – there are areas of damaged paint along the lower arris – these areas should be prepared and redecorated in an appropriate paint.                        |  |



|   |  |
|---|--|
| <p>Left-hand stop-end – there is moisture staining around the stop-end. This suggests that the stop end is leaking and should be re-sealed as soon as possible.</p>   |    |
| <p>First union from the left – the left-hand fixing is corroding and there is a small area of moisture staining and failed paint.</p> <p>This union should also be checked for leaks and repaired as required. The corroded fixing should be replaced at the same time.</p> |   |
| <p>Second union from the left – the right-hand fixing is corroding and there is a small area of moisture staining and failed paint.</p> <p>This union should also be checked for leaks and repaired as required. The corroded fixing should be replaced</p>                 |  |
| <p>Left-hand outlet – one of the fixings is corroding and there are areas of damaged paint on the two sections of guttering and the outlet piece.</p> <p>The outlet should be checked for leaks and the corroded fixing replaced.</p>                                       |  |

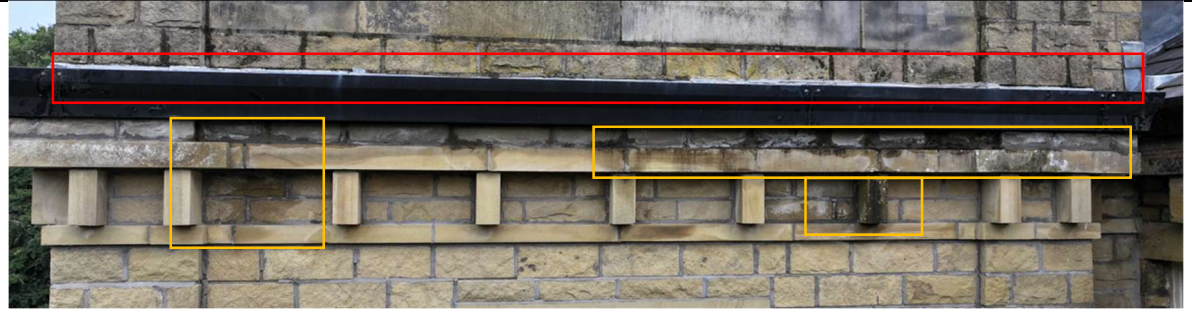
Left-hand tower – there are areas of damaged paint along the run and it looks like some sections have been previously redecorated.



Left-hand tower – red box – sections of the guttering and cover flashing are poorly detailed to the elevation...

Orange boxes – ... this is allowing rainwater to escape down the rear side – this will likely cause premature failure of the guttering run, accelerated decay of the stone and problems with penetrating moisture.

The cover flashing detail should be better detailed in the short-term.



Centre left-hand run, union to the right-hand side of the outlet – the wallhead is saturated, likely as a result of a leak in the guttering.

This needs to be repaired as soon as possible to prevent further deterioration of the stone and problems with moisture ingress.



Centre tower, right-hand abutment – there are areas of moisture staining on the gutter and wall below.

The guttering should be repaired as soon as possible.





Centre right-hand section, first union from the left – moss is growing immediately below the union, this suggests the union is weeping and should be repaired.



Centre right-hand section, union to the right-hand side of the outlet – moss is growing immediately below the union, this suggests the union is weeping and should be repaired.



Right-hand tower, all elevations – there is moss building up under the guttering runs. The areas should be checked for leaks and repaired as required.





### 2.2.2 Valley Gutter

There is ponding along most of the length of the valley gutter – this needs to be cleared out straight away and the fall checked.

We recommend that this is cleared out at least each Spring.





### 2.2.3 Rear Gutter

General comment – the guttering looks like it has been over-painted/the top coat is failing. It should be suitably prepared and redecorated according to the manufacturer's technical specifications.

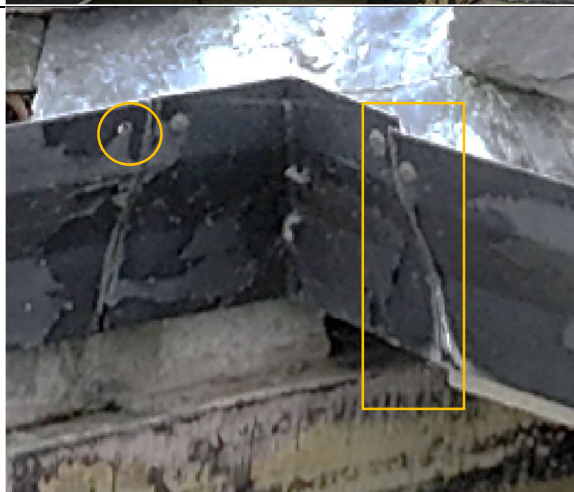


General comment – there is vegetation growing in the guttering. This should be cleared out in the short-term.



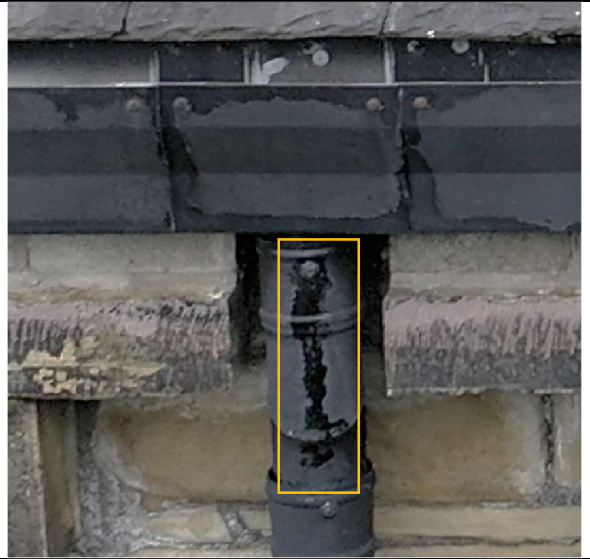
The corner of dormer 8 – one fixing is missing and the corner and run are displaced.

This should be repaired in the short-term.



8 – 9 run – the fall pipes are outside the scope of this instruction, however, we noted that there appears to be a leak in this section.

It should be repaired in the short term.



Dormer 9 – the guttering does not appear to be adequately fixed to the fascia.

This area should be inspected and re-affixed as appropriate.




Dormer 10 – there is ponding at the opposite end of the run to the outlet. This suggests that the run is not set to the correct fall.

The debris should be cleared out and the fall checked and adjusted as necessary.



## 2.3 East Gable Wall

|   |  |
|---|--|
| <p>The detailing on the internal face of the gable wall is poor, and there is an inappropriate repair over the top of this.</p> <p>We recommend that the failing repair and render are removed and the wall correctly detailed.</p> <p>Please do let us know if you need any assistance with designing the correct details for this section.</p>  |    |
| <p>External face – based on the colour of the mortar, this looks to be a cementitious mix. This is inappropriate for a stone building and will likely lead to premature failure of the mortar and stone.</p> <p>The mortar should be inspected in person and if the incorrect mix has been used a plan should be made to set up a sinking fund (if the lease allows this) to begin putting funds aside for future re-pointing of the elevation.</p> |   |
| <p>Coping stones – the wall heads are saturated in places, likely as a result of incorrect detailing (see Section 1.5 below) and missing/inadequate throating (drip grooves) on the underside of the stones.</p> <p>These should be checked next time high-level works are undertaken and cut/amended as necessary.</p>   |  |



## 2.4 West Gable Wall

The pointing and detailing on this elevation are not the best. There are several areas where the pointing is missing and needs to be replaced, the detailing around the windows is generally incorrect and there are holes in the stone from historic fixings etc. We recommend a Schedule of Works is prepared in the short term so the works can be properly tendered and undertaken during the 'lime season' (generally, April/May to September/October). This work will require a suitably engineered and wrapped scaffold.

The wall around the fall pipe is stained and mortar has washed out of the joints. This looks to be historic, however, it should be checked during and following rain to ensure the fall pipe is not leaking.

Once this has been addressed, the stonework should be appropriately cleaned and the joints repointed in an appropriate mortar mix.





Hopper – the hopper is in poor condition; all sides are corroded and we recommend that it is checked for leaks in the short term.



Front spandrel, external face – based on the colour of the mortar, this looks to be a cementitious mix. This is inappropriate for a stone building and will likely lead to premature failure of the mortar and stone. It should be raked out and replaced with a more appropriate mix.



Coping stones – the wall heads are saturated in places, likely as a result of incorrect detailing (see Section 1.5 below) and missing/inadequate throating (drip grooves) on the underside of the stones.

These should be checked next time high-level works are undertaken and cut/amended as necessary.

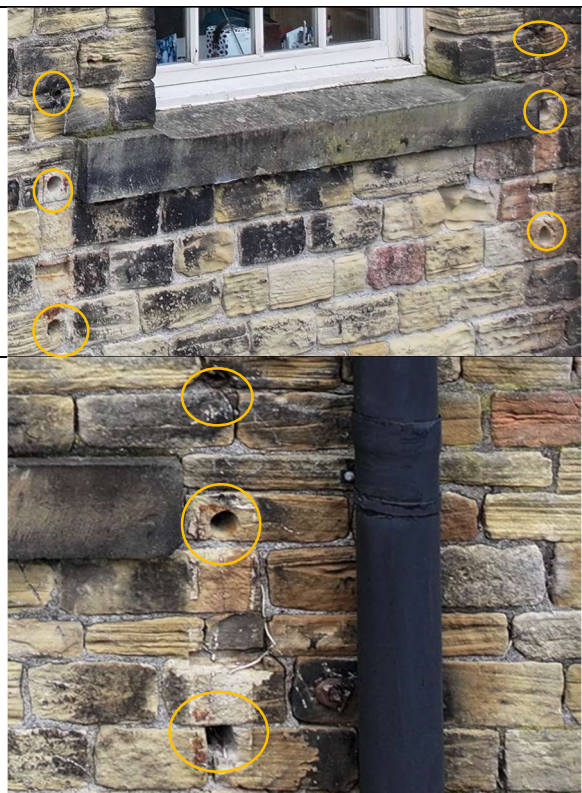


Rear spandrel – the areas of repointing on this section of the wall have been undertaken to a poor standard.





The large holes in the stone should be appropriately repaired – see our comments above on stone repair.



The redundant ferrous metal vent should be cut out and the penetration should be blocked up with matching stone and appropriate mortar.




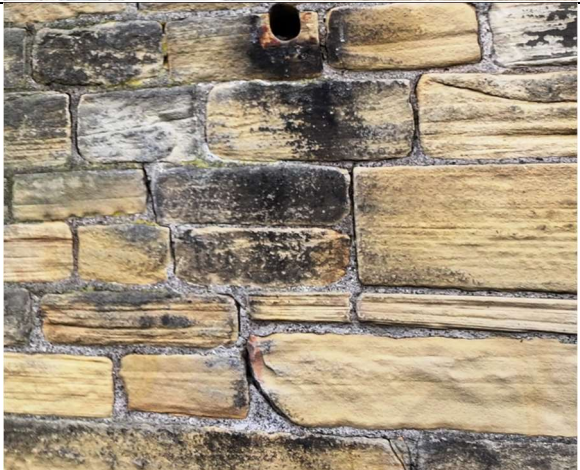

An example photo of where there are gaps in the detailing around the window reveals.

The mortar should be raked out, the stone joints repointed and the abutments detailed in burnt sand mastic.

Note: the timber windows are not part of this instruction, however, on the photos taken, these look like they are in need of localised repair, appropriate preparation and redecoration – see our comments above on paints as this looks to be the primary cause of accelerated decay here.





|   |  |
|---|--|
| <p>An example photo of incorrect detailing around the window reveals.</p> <p>The mortar should be raked out, the stone joints repointed in an appropriate mortar mix and the abutments detailed in burnt sand mastic.</p>     |    |
| <p>There are several areas where there has been a little movement in the structure and the mortar joints have opened up.</p> <p>These joints should be raked out and re-pointed.</p> <p>See our comments above on mortar.</p> |   |
| <p>An example photo showing areas of missing/washed-out mortar.</p> <p>These areas should be re-pointed in the next year.</p> <p>See our comments above on mortar.</p>  |  |



Windowsills – there does not appear to be any throating on the windowsills.

Consideration should be given to cutting throating into the underside of all of the windowsills.



The decaying stones need to be repaired, rotated or replaced.



This penetration needs to be appropriately detailed – the ducting needs to be sealed around with burnt sand mastic (and a louvred vent with insect mesh should be added).





## 2.5 Coping Stones

The original coping stones have been overlaid with concrete paving slabs and then partially dressed in lead.

Both of these details are incorrect and consideration should be given to removing these details and re-bedding the original coping stones on a suitably designed damp-proof course.

