

INSPECTION AND REPAIR OF CHURCHES

CARE OF CHURCHES MEASURE 1991

QUINQUENNIAL REPORT on the

**ST IVES CHURCH
LEADGATE**



Diocese: Durham

Archdeaconry: Durham

Deanery: Lanchester

Job no: M682

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Date of inspection and weather conditions: 8th July 2020

Cloudy and dry becoming sunny later in the survey. Generally cool.

Date of report: 23rd September 2020

Date of previous report: 20th May 2015

Executive Summary.

The church is generally in reasonable condition with some repairs and maintenance tasks undertaken since the last Quinquennial Inspection including full reroofing of the main slated roofs. There are a number of tasks, some more urgent than others that needs to be addressed in this quinquennial period to keep the church in good condition, including various works noted to roofs and rainwater goods to ensure the building remains watertight before the winter.

The condition of the stonework and structural movement noted in a few locations is of increasing concern, with attention needing to be focused initially on the East end of the Church and the movement noted in the Chancel. Although the situation has been observed previously, there has been no programme of works put in place to address the issues and it now needs fairly urgent attention to ensure the condition does not deteriorate. There is cracking noted in a number of locations on the South, North and East Elevations of the Chancel and cracking and damage to the stonework of the window surround has been evident for a number of years. There is also possible bulging of the wall. Damage due to movement is also visible internally in this area, with other issues of salt efflorescence and sanding of stonework in a few places mainly at lower level. Cracking was also noted to the West end of the Church and a number of locations, mainly to the Northern Elevations. These areas all need investigation and subsequent repair, and although these are also urgent, it is accepted that there needs to be a degree of phasing and prioritization to allow funding to be sought for the repairs. A report by a structural Engineer on the East end of the church was commissioned alongside the Quinquennial inspection and that report is appended to this one. Further reports on the other areas of cracking would be advisable in the short term to assess the likely extent and urgency of repairs needed in other areas. Rainwater goods discharge onto the ground, which is rarely a satisfactory solution to surface water disposal, especially when the roof areas is as large as at St Ives and it would be preferable if a drainage solution could be found that took water away from the foundations.

The stonework is generally weathered, with harder pointing in many places contributing in some locations to the speed of decay to what appears to be a fairly soft sandstone. Stones are generally small in size and the depth of these is unknown and will need to be investigated to inform a programme of repair. Although it is obvious that weathering has occurred over many years and some weathered stones appear to have stabilised or are not at the point of needing attention, a number have weathered back to the extent that they will need mortar repair or replacement in the not too distant future. A few have weathered to the extent that they are exposing the wall plate behind. The Western facing elevations have fared poorly and there is salt efflorescence in a few areas and deep cavities and open joints are visible. The Southern elevations have also been badly affected by weathering and failure of mortar, in some cases exacerbated by failure/lack of rainwater goods. The works noted as being a priority in the next year are mainly stonework related so are not listed individually here due to the extent of the works required, but repair, or further investigation is needed fairly urgently in many locations. Repointing works to water tables are also required with a requirement in a few areas to check the condition of individual stones with a view to forming a view on likelihood of repair or replacement.

The rear door to the Vestry needs repair and repainting and the timber to the fascia and boarding to the stairs to the basement needs attention.

There are a few shrubs/sapling taking hold, either in the masonry or at the base of walls and these will need removal as soon as possible. Of concern are the memorials at the base of the walls – whether these relate to locations for burial of ashes, or are just memorials is difficult to tell, but masonry works are likely to disturb these and how these are dealt with will need to be considered when works are carried out.

Internally there are a few areas of salt efflorescence and sanding stonework that would benefit from gentle brushing to remove deposits, with this being repeated on an ongoing basis if the issues recur. There are also areas of cracking that need repair along with works to the exterior as these are planned.

Repair to areas of flooring such as the Chancel floor, one board in the Nave and cracked flag(s) in the South Aisle are also recommended as needing more urgent attention to

ensure they don't become trip hazards.

The heating system is a series of gas fired heaters with individual flues which is reported to be currently functioning satisfactorily.

There is a step up from the porch to the internal lobby. Although this can be made accessible by the use of a temporary ramp, it would be worth considering ways to make a more permanent solution to the issue of level access, especially as there is an accessible WC internally.

Externally the condition of the tarmaced approach to the church and one damaged service/drain cover need attention. The former is likely to be the responsibility of the Local Authority so would need to be raised as an issue with them before the condition deteriorates further. The main gates are also in need of work as are the gate posts and this also should be reported to the Local Authority with a request for action.

Advising on likely costs for repairs is always problematic at this stage as costs are dependent on unknown factors such as access (scaffolding) requirements, size of packages of work and indeed the extent of works in any area, along with contractor selected. For the masonry repairs at St Ives there are still unknowns such as the exact scale of structural repairs required and number of stones that may need replacement which will have an impact on costs. However, taken as a whole, it is likely repairs, including masonry work could fall into the £50 – 249,999 category, although it is understood that works are likely to be phased.

Previous repairs undertaken since the previous report.

The log book was not available at the time of inspection, but the PCC have provided the following information on works carried out in the past 5 years:

Re slating of all slated roofs
Repairs to stone work of cills on South Elevation of the South Aisle
Annual servicing of gas/heating
installation of gas smart meter
Electrical Installation condition report
Redecoration of ceiling and pews in side aisle's

Brief description of the building

St Ives was designed by Charles Hodgson-Fowler and dates from 1865-8 with the North Vestry porch added in 1879. The church is built from local snecked sandstone with ashlar dressings and plinth and a steeply pitched Welsh slate roof with tall gable bellcote. Internally the church includes a Nave with clerestory windows and scissor truss roof and 5 bay arches to the North and South Aisles, A Chancel with organ Chamber and Vestry to North and a chamber fronted by organ pipe to the South (understood to be decorative rather than functional mirroring those on the North side). An unused porch leads off the Vestry and there is a disused heating chamber below the Vestry area.

The choir stalls with Gothic tracery are from St. Oswald's, Gateshead and there is a similar style rood screen and pulpit. The altar is of Caen stone. Early C20 glass includes war memorial windows in the South aisle showing soldiers in battle, and Saints Hilda and Mary of Bethany. The triple window in south aisle has heraldic devices and St. Ives. Many other windows have clear glazing, with original geometrical glass.

An enlarged inner entrance lobby with accessible W.C. compartment was formed within the west end of the South Aisle in 2005.

Listing Grade

Listed grade II

Plan of the Church

A plan was not available at the time of writing the report

Limitations of the report.

A thorough inspection of the structural condition and state of repair of the Church has been made from the ground level only. There was no access to the disused heating chamber which is understood to contain asbestos. It is emphasised that the inspection has been purely visual and parts of the structure which are inaccessible, enclosed or covered up, such as boarded floors, roof space or hidden timbers at wall heads, have not been opened up for inspection. It cannot in consequence be reported that these concealed areas are free from defect, but the report will draw attention to areas where further investigation by opening up or providing improved access will be required.

The Architect is not competent to inspect or test the heating or electrical installations. Recommendations are made in this report for their inspection by qualified and competent persons on a regular basis. The inspection was carried out in dry weather when it was not possible to ascertain whether rainwater goods, gullies or surface water drains were watertight and free flowing.

Damp meters and probes were not used. Any part of the building which may require further investigation is referred to in the appropriate section of this report. Where it is suggested that some part of the building be kept under observation this is intended as guidance for a future monitoring process which will need to be set up by the Church Council with advice from a competent Engineer.

We have not inspected or are competent to inspect trees. Trees protected by a tree preservation order (or within the curtilage of a listed building) must be inspected by a specialist professional adviser. They should consider whether further professional advice on trees should be commissioned, for instance in relation to Safety concerns, the impact of trees on the church itself, the importance of the trees themselves.

It is possible that concrete used in any construction alterations or repairs of the Church between 1923 and 1975 could contain High Alumina Cement and/or Calcium Chloride additives. No investigation has been carried out to determine whether these substances are actually present, and it is not possible to report that such parts of the building are entirely free of risk in this report. Where concrete of that period is persistently damp the risk of failure is significant, and signs of failure should be reported to the Church Architect.

We have not been made aware of any nature conservation issues such as protected species, mosses, lichens, grassland or bats which might inhabit the building or churchyard. If works are carried out to the building or churchyard consideration should be given as to whether these (or others) may be present and where necessary professional surveys commissioned before works start.

This report describes defects observed and is not a specification for the execution of work and must not be used as such, nor is it suitable for obtaining builder's estimates. The church architect is willing to advise the PCC on implementing the recommendations and will, if so requested, prepare a specification, seek tenders and oversee the repairs. The PCC is advised to seek ongoing advice from the professional adviser on problems with the building if these are outside the experience of the PCC. The repairs recommended in the report will (with the exception of some minor maintenance items) be subject to the faculty jurisdiction. Guidance on whether particular work is subject to faculty can be obtained from the DAC.

Before starting any works, the PCC should make contact with the insurance company to ensure that cover is adequate and whether any conditions apply.

Advice to the PCC

Information on planning for disaster management including fire, lightning, explosions, storms, floods and vandalism and theft can be found on the Church care website

<https://www.churchofengland.org/more/church-resources/churchcare/advice-and-guidance-church-buildings/disaster-prevention-and-management>

Electrical Installation

Any electrical installation should be tested at least every five years in accordance with the recommendations of the Church Buildings Council. The inspection and testing should be carried out in accordance with IEE Regulations, Guidance Note No. 3, and an inspection certificate obtained in every case. The certificate should be kept with the church logbook. PAT testing of appliances should be carried out at recommended intervals.

Heating Installation

A proper examination and test should be made of the heating system by a qualified engineer each summer before the heating season begins, and the report kept with the Church Logbook.

Lightning Protection

Any lightning conductor should be tested at least every five years in accordance with the current British Standard by a competent engineer. The record of the test results and conditions should be kept with the Church Logbook.

Asbestos

The management of asbestos in buildings is regulated by law. A suitable and sufficient assessment (a management survey) should be made as to whether asbestos is or is liable to be present in the premises. Further details on making an assessment are available on the HSE website.

The assessment has not been covered by this report and it is the duty of the PCC to ensure that this has been, or is carried out, and updated as required. Before commencing any works, a refurbishment/demolition survey should be carried out and the report provided to the contractor.

Equality Act

The PCC should ensure that they have understood their responsibilities under the Equality Act 2010.

Health and Safety

Overall responsibility for the health and safety of the church and churchyard lies with the incumbent and PCC. This report may identify areas of risk as part of the inspection, but this does not equate to a thorough and complete risk assessment by the PCC of the building and churchyard. Please note that under the CDM Regulations 2015 any project involving more than one contractor (this includes subcontractors), however small, brings with it additional requirements and responsibilities for the client and other parties involved. Further guidance is available on the HSE website including a short guide for Clients. <http://www.hse.gov.uk>

Bats and other protected species

The PCC should be aware of its responsibilities where protected species are present in a church. Guidance can be found at: <https://www.churchofengland.org/more/church-resources/churchcare/advice-and-guidance-church-buildings/bats-churches> and from Natural England.

Sustainable buildings

A quinquennial inspection is a good opportunity for a PCC to reflect on the sustainability of the building and its use. This may include adapting the building to allow greater community use, considering how to increase resilience in the face of predicted changes to the climate, as well as increasing energy efficiency and considering other environmental issues. Further guidance is available on the Churchcare website. One link is <https://www.churchofengland.org/more/policy-and-thinking/our-views/environment-and-climate-change/how-you-can-act/sustainable-buildings>

One copy of this report should be kept with the Church Logbook and records for future reference. The Architect will send additional copies of the report to the Archdeacon and to the Diocesan Office.

Maintenance

Maintenance of the Church is the responsibility of the PCC, but the churchyard is closed and the responsibility of the Local Authority. The responsibility for upkeep of the boundaries is unknown in some areas.

It is recommended that a maintenance plan is drafted if not already in place and that regular cyclical maintenance tasks should be carried out as required by members of the PCC or contractors. These might include clearing gutters and drains of vegetation and debris, carrying out a visual inspection of condition on a yearly basis of roofs, gutters or walls where there are known issues or after a period of bad weather.

Report main section

The survey started with the external areas followed by interior areas and concluded with a brief inspection of the external environs of the church, although responsibility for the maintenance of these areas is understood to be that of the Local Authority. The report starts with the external areas including roof, rainwater goods and windows followed with internal areas and concluding with the external areas around the church.

Where works are required these have been ascribed a category depending on the urgency of the repair/work required. These are set out below:

A - Urgent, requiring immediate attention

B - Requires attention within 12 months

C - Requires attention within the next 18 – 24 months

D - Requires attention within the quinquennial period E - A desirable improvement with no timescale

M - routine maintenance (i.e. clearing leaves from a gutter). This can generally be done without professional advice or a faculty.

Summary of report

Location	Description	Condition	Repair needs	Category
External				
1. Porch	Semi coursed sandstone	<p>West Elevation – The upper section of the wall is stained white, due to salt efflorescence, although there were no deposits on the surface of the stone at the time of the inspection. Roof repairs carried out since the last inspection may have resolved issues of dampness on this wall. At high level there are deep activities visible that will be allowing water to penetrate into the core of the wall. A number of stones are weathering, some are relatively stable, but others would benefit from descaling. At lower level there are a number of hungry joints with isolated open joints to the buttress, with slight weathering to the upper stones.</p> <p>South Elevation – a few of the stones to the water table are in poor condition. Two on the West side are delaminating. One section of the upper part of one stone has been lost in the past and may be now trapping water, the remaining section along the same plane is likely to fail in due course. On the East side one sizeable section at the lower edge of one stone is cracked and appears loose. Open/hungry joints to the water table generally. Perimeter cracking around edges of stones noted in a few areas to the main wall along with open joints. Contour scaling and weathering to isolated stones with a small number in the gable possibly warranting replacement. Signs of movement and possible cracking noted in a few locations, although this is hard to tell in a few instances where loss of mortar may be unconnected to movement. There is loss of mortar for instance between the</p>	<p>Repoint deep cavities and other open and hungry joints using lime mortar to all elevations. Remove vegetation growing in joints</p> <p>Repair wall plate</p> <p>Replace missing stonework to the wall head on the East Elevation</p> <p>Repoint and rebed loose stonework to Eastern buttress</p> <p>Repair cracked section of water table and replace/repair the damaged stone to the West. Monitor the condition of remaining stones</p> <p>Repoint water table with lime mortar</p> <p>Repair or replace damaged stones to hood moulding</p> <p>Gently descale weathered stones</p>	<p>B</p> <p>B</p> <p>B</p> <p>B</p> <p>B then M</p> <p>B</p> <p>C</p> <p>C</p>

		<p>inner and outer arch and some of the stones forming the hood moulding appear out of alignment. Other stones to the hood moulding are in poor condition with up to 5 delaminating or badly weathered with some loss of stone including to the outer face. These will need repair or replacement as they are not fulfilling their original purpose of shedding water. The abacus is badly weathered and on the West side has had an indented repair in the past. Sympathetic repair to stabilise the stonework could extend the life of these stones, although if adjacent stones are being replaced, this should be reassessed at the same time. Some weathering noted to the arch stonework and one deeper cavity that would benefit from a mortar repair.</p> <p>East Elevation – The buttress requires attention as there is significant loss of mortar and a few stones appear loosely bedded and could fall or move out of alignment if anyone were to interfere with them. Deep cavities noted in places and loss of stone to the wall head exposing the wall plate in places. The wall plate looks slightly rotten behind the downpipe. One fern growing in the wall and isolated stone are badly weathered and may need replacing.</p>		
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<p>2. South Elevation of South Aisle</p>	<p>Semi coursed sandstone</p>	<p>To the West of the porch there are many weathered stones many of which are stable, but a number need repair or possible replacement. Some may be capable of mortar repair to extend their life, others due to their small size may be better to replace. More significant issues at higher level with missing and weathered stones exposing the wall plate in part, one stone appears loose. Some deep cavities in the mortar in the same area and hungry joints across this section of wall.</p> <p>To the East of the porch mortar is harder than ideal, but generally sound. There are some open joints and deeper cavities particularly to the Eastern end of the wall and buttress where the condition of the pointing is poorer with significant open and hungry joints. In this area pointing appears softer, possibly due to the loss of the harder mortar used elsewhere on this elevation exposing older lime mortar below. One stone at higher level has weathered back sufficiently to expose the wall plate and there is an areas of looser stonework behind the eastern downpipe with what looks like the remains of a nest. Elsewhere there are isolated weathered stones, some of which will require repair or replacement and one stone at low level that is cracked with part missing. Vent grilles at low level are becoming swamped by rising ground levels in places, a situation not helped by what appears to be the burial of ashes along the perimeter of the wall (which has occurred without first lowering the ground level sufficiently). One vent is loose in the wall. The Eastern buttress has significant open joints and a fern is growing in the Western side. One stone is cracked and needs repairing with one section of the cracked stone possibly now coming loose. Stonework is weathered with some requiring</p>	<p>Bed new sections of stonework in areas where the wall plate is exposed. The condition of the wall plate should be checked before carrying out this work</p> <p>Carry out repointing to deep cavities and hungry joints where noted and rebed loose stonework all using lime mortar to the Eastern end of the wall and associated buttress</p> <p>Rebed loose grilles</p> <p>Repair cracked stone to Eastern buttress</p> <p>Carry out repairs, or where repair replace badly weathered individual stones to the buttress</p> <p>Repoint other areas of the wall using lime mortar</p> <p>Form mortar repairs to significantly weathered stone capable of repair and replace isolated stones that would benefit from replacement</p> <p>Lower ground levels so they are a suitable distance below the grilles (if there has been burial of ashes in some place consider how this could be done without causing distress to relatives (or work around these areas if practical)</p>	<p>B</p> <p>B</p> <p>B</p> <p>B</p> <p>B - C</p> <p>C</p> <p>C</p> <p>C</p> <p>C</p>
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<p>South Elevation of South Aisle cont'd</p>		<p>Western window – crack to head of the surround and hungry joints elsewhere. Slight cracking to mullions which should be checked at the next inspection</p> <p>2nd window from West – hungry/open joints to surround and slight cracking between the stone surround and associated mortar on the outer edge. Slight delamination of stone to mullion.</p> <p>2nd window from East – this window is in similar condition to the western windows but the mortar fillet to the base of the window is also lifting and requires replacement</p> <p>Eastern window – hungry open joints to surround with some damage to the cill</p>	<p>To all windows repoint open joints and cracks using lime mortar.</p> <p>Replace fillet to the base of the window second from East</p>	<p>C</p> <p>C</p>
<p>3. South Elevation of Nave (high level)</p>		<p>There are areas of replacement stonework to the window surrounds of the clerestory windows.</p> <p>Isolated open joints are visible to the projecting eaves, but these are reasonably sheltered. Areas of open joints and some shrinkage cracking between stone and mortar is visible in places along the length of the wall. Some stones are weathered, with some requiring deshaling, repair or in isolated cases possible replacement. Cracking to Eastern end of the wall with some stonework appearing badly weathered. This will need further higher-level inspection and repair.</p>	<p>Inspect high level stonework especially to the Eastern end of the wall and carry out necessary repairs</p> <p>Repoint open joints and cracking using lime mortar</p> <p>Deshale isolated stones</p> <p>Repair or replace badly weathered stonework</p>	<p>B - C</p> <p>B - C</p> <p>C</p> <p>C</p>

4. South Elevation of Organ Chamber (South)	Semi coursed sandstone	Stonework at lower level is sounder than at upper level. Above plinth level stone is weathered and exposed lime mortar appears to contain coal particles or similar. Some stone have weathered back significantly and there are a number of deeper cavities and hungry joints. One section of water table needs further inspection and possible repair	Repoint deep cavities and hungry/open joints using lime mortar Repair badly weathered stone with isolated replacement where required Inspect water table and carry out any repairs required	B – C B – C B
5. East Elevation of Organ Chamber (South)	Semi coursed sandstone	Stonework in generally sound condition and although it is weathered it is in better condition than stone in other areas. Isolate open joint and areas of failing mortar with possible cracking to the left-hand side of the elevation. Section of stonework to the upper right-hand side has more significant area of open joints and weathered stonework than noted to the rest of the wall. Open joints to water table	Repoint open joints to water table and wall using lime mortar	B for worst sections otherwise C
6. East Elevation of Nave	Semi coursed sandstone	This was difficult to inspect from ground level due to light conditions. Some areas appear to have been repointed but on the Northern side in particular there may be issues with the mortar pointing under the water table in places. The bedding of the apex stone/cross should be checked when high level access is available	Check pointing/bedding of cross Carry out any repointing works using lime mortar	B C

7. South Elevation of Chancel	Semi coursed sandstone	<p>Some open joints to projecting eaves – in this area the eaves are less well protected than in other areas. The stonework to the plinth is generally sound except under the downpipe where mortar has been washed out of joints. Above plinth level a number of stones are weathered with some having weathered back more significantly than others. The overall depth of the stone used in the church (as many of the stones are fairly small this may not be great) will need to be established and will help with the decision as to which stones are nearing the end of their useful life alongside an assessment of general condition. This may need to be investigated in key areas before a programme of stone repairs is agreed. Cracking near the East end is visible that is more noticeable in the lower half of the wall but appears to extend full height. Two sections of cracking/wider joints to the projecting eaves at this end of the elevation have been pointed but have opened up again slightly and mortar in one joint may be slightly loose. A number of open joints are visible across the wall including below the downpipe, and failing mortar is also an issue in isolated joints. The rusty window guards are staining the stonework below.</p>	<p>Investigate the cause of the cracking to the East end of the Chancel with advice sought from a Structural Engineer and carry out recommended repairs as recommended alongside a programme of masonry repairs</p> <p>Repoint open joints and cracking using lime mortar</p> <p>Form mortar repairs or replace the most badly weathered stones, having established the average depth of facing stonework</p> <p>Repoint joints to projecting eaves using lime mortar</p>	<p>A for advice, B for repairs</p> <p>B</p> <p>B</p> <p>C</p>
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<p>8. East Elevation of Chancel</p>	<p>Semi coursed sandstone</p>	<p>Cracking on this elevation and to this end of the church is more significant than other areas. There are two cracks on both the South and North side of the window running up to the top of the gable, significant cracking and movement to the stonework of the window itself and cracking in a number of locations including between the window cill and the ground. The cill is cracked in on place and there is damage to another section that will need closer inspection. One stone to the window surround and associated hood moulding have suffered significant damage and loss of the stone face due to movement and are located at the base of one of the areas of cracking. There are also cracks towards the North and South ends of the wall with two quoins damaged/cracked to the Northern corner. Some sections of the hood moulding appear to possibly be loose or are becoming loose. There are also some localised areas of stonework appearing to be bulging. The bedding of the cross should be checked to ensure that is well secured. The cause of the cracking should be investigated by an engineer and a programme of repairs drawn up as soon as possible to enable a funding package to be pulled together (note – this has now been inspected and the engineers report is appended to this report.</p> <p>The elevation has been pointed with harder mortar in the past, and in some areas the mortar is buttered over the face of the stonework. Some weathered stonework was noted, although generally not as significant and issue as on the Southern elevations and although only isolated stones may require replacement at present, the harder mortar may cause more to erode quicker</p>	<p>An engineer's report has already been received which suggests possible reasons for the movement and recommends options for repair – a copy of this is included in this report. This work should be considered a priority and a repair programme drawn up as quickly as possible to include all structural work and masonry repairs on this an sections of the wall on the North and South side of this elevation, as well as works to the windows. These works will need discussion with many parties, so time will be needed to facilitate this as well as finding sources for funding. High level access is likely to be required to specify the works required</p>	<p>A for starting to prepare a package of works, B to carry out the works</p>
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East Elevation of Chancel cont'd		<p>as time goes by. However, removal of some of the pointing may damage some of the stones or expose more damaged stones beneath the mortar where this covers much of the face of certain stones.</p> <p>Open joints were noted to the hood moulding and to other parts of the stonework to the window as well as to the wall generally, most noticeably at higher level. Areas of mortar have failed in places including in the vicinity of cracks and there are sections of the mortar fillets around the windows that are coming loose and may fall in due course. Some sections of the water table are out of alignment with isolated sections weathered or damaged.</p>		
9. North Elevation of Chancel	Semi coursed sandstone	<p>Vegetation growing at the base of the wall (an elder bush) is partly obscuring condition. There is a crack running almost full height towards the Eastern corner and possibly another area of cracking to the left-hand side of the window. There is also a crack to the window head. The stonework is weathered, but generally fairly stable with a relatively small number of stones that might warrant replacement.</p> <p>There are a number of open joints including to the projecting eaves and a sapling is taking hold at the East end at the top of an area of cracking.</p>	<p>Inspect areas of cracking and include all works with the works to repair and stabilise the East Gable</p> <p>Repoint other open joints using lime mortar and replace isolated badly weathered stones</p> <p>Remove elder from the base of the wall and remove or kill roots.</p>	<p>A – repair package B to carry out the works</p> <p>B - C</p> <p>B</p>
10. East Elevation of Vestry	Semi coursed sandstone	<p>Cracking noted in a few areas but not as severe as on the Chancel. Stonework is weathered but currently fairly stable although one stone might benefit from replacement and there are some open and hungry joints.</p>	<p>Repoint cracks and open or hungry joints using lime mortar</p>	<p>C</p>

11. Eastern Elevation of staircase to East of Vestry	Semi coursed sandstone with are of timber cladding covering windows	One section of timber cladding is damaged exposing the fragile material used to glaze the windows. Some areas of failing pointing were noted but generally the stonework is reasonably sound although there is a crack to the higher section of masonry. Some lower sections of walling were concealed by vegetation. A section of fascia is failing at the end and will require replacement.	<p>Replace section of fascia</p> <p>Repair timber boarding over windows</p> <p>Repoint isolated open joints and cracking using lime mortar</p>	<p>B</p> <p>B</p> <p>C</p>
12. North Elevation of staircase to East of Vestry	Semi coursed sandstone	Slight cracking is visible near the quoins to the Eastern end of the wall and the door needs repair and painting	<p>Repair and paint door</p> <p>Repoint areas of cracking using lime mortar</p>	<p>B</p> <p>C</p>
13. North Elevation of Vestry	Semi coursed sandstone	The stone on this elevation has weathered but is not a major concern at the present time. There is slight cracking to the Eastern side of this elevation which would benefit from pointing and possible future monitoring. At ground level a rusty and slightly ill-fitting cover to an old coal hole or similar would benefit from being replaced with a more permanent covering that allow ventilation but excludes leaves which are building up beneath the cover.	<p>Repoint crack using lime mortar and visually monitor for signs of ongoing movement.</p> <p>Replace cover over coal hole with a more permanent version</p>	<p>C</p> <p>D</p>

14. Northern porch	Semi coursed sandstone	<p>There is significant leaf build up inside the porch which is obviously not currently used but may on occasion be required as a second means of exit. The locked gate is rusting and there are deposits from sanding stonework on the step indicating issues with the stonework to the door surround. Some stones are weathered and may need repair as part of a wider masonry project when further inspection will hopefully be possible. Some cracking around the lintel is visible. There are open joints to the steps leading up to the porch and some are out of alignment.</p> <p>To the North Elevation there is cracking to both the West and East ends of the walls and a central crack is also visible on the West Elevation</p>	<p>Remove leaf build up in the porch and sweep up deposits from sanding stonework.</p> <p>Inspect stone to door surround and include repairs works in with other masonry repairs</p> <p>Cracking to be inspected by a structural engineer along with other areas and a programme of repairs based on urgency of action drawn up</p> <p>Repoint cracking around lintel using lime mortar</p> <p>Realign stonework to steps and point open joints</p>	<p>B then M</p> <p>B – C</p> <p>B</p> <p>C</p> <p>C</p>
15. North Elevation of Nave (high level)	Semi coursed sandstone	<p>In common with the South elevation of the Nave a number of the stones to window surrounds have been replaced. Open joints are visible to the projecting eaves and there are areas of failing and cracked mortar and isolated open or hungry joints in a number of locations, but most noticeably towards the eastern end of the wall</p>	<p>Repoint open and hungry joints and any areas of cracking using lime mortar</p>	<p>C</p>

16. North Elevation of North Aisle	Semi coursed sandstone	<p>Cracking is visible between the porch and main wall of the North Aisle and cracking is visible in a number of other locations including to the sides of some of the windows along this elevation and potentially near the Western downpipe. In the vicinity of the Western downpipe there are open joints possibly due to past issues with rainwater goods and at higher level some loss of stonework. A number of open joints are visible elsewhere including at lower level. At the Eastern end there is one stone out of alignment which may be loose.</p> <p>The stonework to all the window surrounds along this elevation are behind the window protection which made full inspection difficult due to reflections but possibly also affords some protection to the weathered stonework.</p> <p>Eastern window – there is a crack to window head and slight delamination to the mullions. Open joints to stonework of window surround.</p> <p>Second window from East – Weathering noted to a number of the jamb stones and one cracked stone which possibly needs pinning and pointing.</p> <p>Central window – weathered stonework to the cill and the base of the mullion and open joints between a number of stones</p> <p>Second window from west – open joints to window surround and mullion delaminating</p> <p>Western window – open joints to window surround</p> <p>A number of the vents are loose or have become</p>	<p>Repoint cracks using lime mortar and visually monitor for signs of ongoing movement.</p> <p>Repoint open and hungry joints using lime mortar</p> <p>Rebed vents and repaint</p> <p>Inspect window surrounds and agree a programme of stonework repairs and repointing</p>	<p>B</p> <p>B</p> <p>B</p> <p>C</p>
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17. West Elevation of North Aisle	Semi coursed sandstone	Cracking noted to the North and South sides of this elevation and cracking/loss of mortar at the junction between the wall top and water table. One stone to the water table is damaged and may need replacing. A number of open and hungry joints especially at high level with some of the mortar in the vicinity of the cracks starting to come loose	<p>Cracking to be inspected by a structural engineer along with other areas and a programme of repairs based on urgency of action drawn up</p> <p>Repoint open and hungry joints using lime mortar</p> <p>Inspect damaged stone to water table and consider whether replacement is required</p>	<p>B</p> <p>B – C</p> <p>B</p>
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18. West Elevation of Nave	Semi coursed sandstone	<p>Cracking to the North side of the Northern buttress. To the buttress itself there is weathered stonework at the lower levels, with some of the stone in worst condition possibly needing repair (mortar repair) or replacement. The buttress and wall are pointed with harder mortar with some associated weathering of stonework and there is slight cracking between mortar and stone in a few locations. A small holly is growing at the base of the wall which needs to be removed. There are some issues with the water table including damaged stones and open joints – these will need closer inspection to ascertain whether any need further work other than just repointing of the open joints. There is significant cracking below the water table and in other places at higher level such as over the Northern buttress and many stones are weathered, some more significantly than other. Some areas of mortar below the water table may be working their way loose. These will need further inspection and possibly either repair or replacement as part of a programme of masonry works. Open joints to window surrounds with isolated open joints to the wall generally although most noticeably at higher level. The base of the wall appears to also be part of a garden of remembrance or similar – when works are carried out on this wall, care will need to be taken as to how to protect this area from the buildup of debris falling from above.</p> <p>To the Southern buttress, there are a number of weathered stones, some of which may need repair or replacement and cracking to one side. The bellcote has been repaired during the last quinquennial period and the condition appears to currently be stable</p>	<p>Remove Holly including roots</p> <p>Cracking to be inspected by a structural engineer along with other areas and a programme of repairs based on urgency of action drawn up</p> <p>Carry out masonry repairs including stone repair, replacement and pointing and works to cracks</p>	<p>A</p> <p>A – B</p> <p>B</p>
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19. West Elevation of South Aisle	Semi coursed sandstone	There are issues with cracking of the Southern side of this elevation and significant weathering of stones with deep cavities visible in a number of places. There are significant levels of sanding at the base of the wall and this wall would warrant repair fairly promptly. The condition of two of the stones to the water table is poor and these require further inspection and possible repair or replacement. Mortar under the water table is cracked and some areas look like they are becoming loose and may fall. The window cill is weathered and the face of a number of stones to the jambs are being lost	<p>Cracking to be inspected by a structural engineer along with other areas and a programme of repairs based on urgency of action drawn up</p> <p>Carry out masonry repairs including stone repair, replacement and pointing using lime mortar and works to cracks</p> <p>Inspect water table and repair or replace damaged stones</p>	<p>B</p> <p>B</p> <p>B</p>
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20. Roofs	Welsh slate with isolated areas of felt to flat roofs	<p><u>Porch Roof</u> – The mortar fillet is coming away from the water table on both sides of the roof. It is understood that this has been an issue from the time the roof works were completed. The gap is large enough at the ridge to be able to clearly see daylight through the crack.</p> <p><u>South Aisle roof</u> Three broken slates noted in the gutter with further possibly starting to slip near the porch. Mortar fillet appears loose and possibly coming away from the water table</p> <p><u>Nave Roof</u> South slope – 2 slates were noted in the gutter one of which appears to be in one piece but could fall in high winds. The flashings are lifting to the East of and just below the bellcote and need to be reformed into place and maybe secured in some way if possible North slope – there is a more significant issue with torn flashings that are now flapping in the wind</p> <p><u>South Organ Chamber</u> Section of mortar fillet missing to right hand side</p> <p><u>Roof over Northern steps down to cellar</u> This appeared generally sound but there is cracking of mortar around the flue which is providing a seal between the felt and wall over.</p>	<p>Reform mortar fillet to the South porch</p> <p>Repair mortar fillets elsewhere where noted as being defective</p> <p>Refix flashings to the East side of the bellcote on the South slope of the Nave roof where it has lifted and replace flashings to the East end of the North slope of the Nave roof</p> <p>Carry out roof repairs to replace slipped slates</p> <p>Repoint area around the flue over the felt roof to the steps down to the old boiler house</p>	<p>A – B</p> <p>A – B</p> <p>A</p> <p>A</p> <p>B</p>
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<p>21. Rainwater Goods</p>	<p>Cast iron gutters and downpipes</p>	<p>Rainwater goods discharge onto the ground which is a real concern as this water will be getting into footings and may be adding to the issues with dampness noted internally and potentially movement. If there are gullies at the base of any of the downpipes, these were not visible during the survey and need to be identified, cleared and regularly maintained.</p> <p>The gutter on the West side of the main porch is slightly out of alignment – the joint is rusty and may be leaking, which should be checked during rainfall and remedied if required.</p> <p>One missing section of downpipe between the South Aisle and porch roof (West) and one section of gutter to the East of the porch (South Aisle) is chipped. This may not represent an issue but should be checked during heavy rain to make sure it doesn't readily overflow. The lower section of downpipe and shoe are also missing from the South Chancel roof – this is currently discharging water just above the flue which is obviously not advisable</p> <p>To the North Aisle one downpipe at least appears to have a slight buildup of material including fragments of slate. It doesn't appear blocked but should be cleared to remove any significant debris that may cause it to become blocked in the future</p>	<p>Check whether porch gutter is leaking and make good if required</p> <p>Carry out repairs to all rainwater goods and check South Aisle gutter when raining to check the chipped section is not allowing rain to overflow onto the wall below</p> <p>Fix new sections of downpipes and shoes where noted as missing</p> <p>As rainwater appears to be discharged onto the ground, consideration should be given to options for installing surface water drains to take water away from the church.</p>	<p>B</p> <p>A</p> <p>A</p> <p>B - C</p>
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22. Windows		<p>The window guard to the Eastern window of the South organ chamber is badly rusted and offering little protection to the window. The window guards to the South Chancel windows are deformed and rusty and require replacement. The guard to the East Vestry window is slightly deformed and rusting, but possibly not as bad as the other two areas already noted above</p> <p>The window protection to the window in the West elevation of the South Aisle is discoloured</p> <p>Rusty saddle bars to store windows.</p> <p>Western window in South Aisle – window bowed slightly but not of immediate concern</p>	Replace badly rusted window guards	B
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Internal				
1. Porch	Exposed stone floor with flagged floor. Boarding to roof painted white following the roof slope	<p>The porch has been pointed with harder mortar and some stones have weathered back as a consequence. There is significant weathering to the stones of the main entrance door jamb with voids to the interior meaning the door is ineffectively sealed. Although there is an inner porch, this must have a negative effect on the internal environmental conditions and ideally should be addressed when other masonry works are carried out. The condition of the door surround on the South wall is as described externally. Salt effervescent is noticeable on the West wall internally in common with issues noted externally and salts are also noticeable on the stone bench on this wall and also on the East wall. Algae is also present on these walls and both benches were damp at the time of the survey. There are isolated open joints to the floor. The concrete repair to the step needs monitoring as one side is slightly uneven. Although a temporary ramp is available when required, it would be worth exploring whether there are options to provide a more permanent level access solution into the church.</p> <p>The ceiling is in need of attention with failing paint and damp (presumably rectified when the area was reroofed) has affected the timber with some areas needing further inspection and replacement of any defective boards.</p>	<p>Gently brush down any salts that appear with a soft brush</p> <p>Inspect the roof timbers and replace any that are damaged. Repaint ceiling on completion.</p> <p>Carry out repairs to the worst of the damaged stonework</p> <p>Repoint open joints to the floor with lime mortar</p> <p>Monitor condition of mortar repair to step and repair/replace if it starts to fail and becomes a trip hazard</p> <p>Explore options to provide a more permanent level access into the church</p>	<p>B then M</p> <p>C</p> <p>B – C</p> <p>D</p> <p>Ongoing</p> <p>E</p>

2. Inner Lobby	Exposed stonework to South wall, new timber and glazed screen to East and North walls and modern partition to the West. Carpeted floor	Daylight is visible around parts of the door due to weathered stonework noted in the porch and there is slat effervescence to the door reveal. There are the remains of harder strap pointing and the exposed stone wall is sanding with material building up on the carpet due to the church being closed due to covid. Slight cracking and some deshaling of loose material are required Utility cupboard – significant sanding to the stone walls with some open joints and slight cracking and loss of face of stonework to western wall	Gently deshale/brush sanding and damaged stonework to remove loose material taking care to avoid damage to the underlying stone Gently brush down any salts that appear with a soft brush Repoint open joints/cracks using lime mortar	B then M B then M D
3. WC	Plastered and tiled walls with projecting stone corbel. Plastered ceiling with vinyl flooring	Damp has caused issues with the stone corbel which is now in poor condition. As noted in the porch it is assumed that this may be linked to past ingress before the roof works were carried out. Slight cracking to boxing, but this is not a concern at present. There is a tap in the room with no drain under – this is always a concern in case there is a defect, or someone accidentally leaves it dripping.	Gently brush down corbel to remove loose material and expose the stone below. Monitor ongoing condition Ensure that there is always a bucket or similar under the tap as a minimum to catch any drips	A then M M

<p>4. Nave</p>	<p>Exposed stone walls with 5 arch arcade to North and South. Carpeted floor level with timber pew platforms. Boarded timber ceiling following the line of the roof slope with exposed trusses</p>	<p>North wall – there is a possible open joint to the Eastern clerestory window but may just be darker pointing as it is difficult to tell from ground level even with binoculars. Cracking noted in the North west corner which should be inspected by a Structural Engineer. Sanding and damage visible to the base of a number of the columns with similar damage to adjacent paving at the Eastern end of the Nave.</p> <p>East Wall – Cracking noted in a number of areas including to right hand side and over the Chancel arch with cracking running down the right hand side of the arch and cracking also to the left, Northern side of the arch. Open joints to the heard of the arch</p> <p>South Wall – The new porch infill is in sound condition but possible cracking to the Western corner. Exfoliating stonework in a few areas including to Western corner and some of the clerestory windows. Cracking that looks historic to the base of the second column from the West and wax deposits at the base of the first column from the East. Salt efflorescence to the Western column</p> <p>West Wall – sand deposits noted at the base of the wall with significant open joints and sanding stone to the lower sections of the wall. Pointing elsewhere is reasonably sound. Stone to reveals exfoliating and would benefit from descaling. It was difficult to see any issues at higher level due to light levels but there are possibly areas of cracking repointed in the past with harder mortar. One board to timber flooring between pews is</p>	<p>Cracking to East wall and North wall to be inspected by a structural engineer along with other areas and a programme of repairs based on urgency of action drawn up</p> <p>Carry out works to cracks as advised by the engineer or point with lime mortar and visually monitor if no other work is required</p> <p>Repoint open joints using lime mortar</p> <p>Gently brush sanding and exfoliating stonework to remove loose deposits</p> <p>Gently brush off any salt deposits to the base of columns/walls</p> <p>Inspect and repair sunken board</p>	<p>B – C</p> <p>B – C</p> <p>C</p> <p>C</p> <p>A then M</p> <p>B</p>
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<p>5. South Aisle</p>	<p>Exposed stone walls with arched arcade to North. Timber glazed screen to lobby to West. Stone flagged aisle level with timber pew platforms. Boarded timber ceiling following the line of the roof slope with exposed trusses</p>	<p>North wall – Salts noted on the ground which appear to have fallen from higher level – it is assumed that issues with dampness have been resolved following roof repairs, but salts should ideally be brushed up and off of the wall and the area monitored.</p> <p>East Wall – Southern ‘organ’ chamber</p> <p>South Wall – issues with the stonework were noted between the second and third windows from the West.</p> <p>Western window – cracking to the left-hand reveal and one cracked stone over heater. Stone to cill/surround weathered.</p> <p>Second window from West – as above one cracked stone over the heater. Slight cracking to right hand reveal which appears to have been repointed in the past and has reopened. loss of mortar between the lintel and window surround.</p> <p>Second window from East – cracking to both reveals and loss of mortar between the lintel and window surround.</p> <p>Eastern window – Again slight cracking to both reveals and the cill/surround appears to have possibly been coated in the past presumably in an attempt to stabilise the stonework</p> <p>West Wall – the lobby infill is sound condition, although the stone wall behind was difficult to inspect.</p> <p>Isolated flags are uneven, and a few may be or become a trip hazard. One corner of one flag is cracked and loose and needs resetting.</p>	<p>Sweep up salts form floor and remove salts from masonry at high level on the North wall.</p> <p>Rebed/loose/cracked section of flag and monitor uneven areas</p> <p>Repoint cracks to window reveals using lime mortar and visually monitor area on completion for signs of ongoing movement</p> <p>Rebed/point cracked areas of stonework over heaters</p>	<p>B then M if salt reform</p> <p>B</p> <p>C</p> <p>C</p>
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<p>6. North Aisle including storage area and Chapel</p>	<p>Exposed stone walls with arched arcade to South. Stone flagged aisle level with timber pew platforms. Raised carpeted area to Chapel at the Eastern end. Partitioned storage area to West end. Boarded timber ceiling following the line of the roof slope with exposed trusses</p>	<p>North wall – Cracking to reveal of First window from West (East of the Storage Area) with one section of mortar coming loose. Second window from West - minor delamination to upstand of window surround and slight cracking Second window from East - minor delamination to upstand of window surround First window from East – slight cracking to reveal and deterioration to upstand of window surround</p> <p>East Wall – Significant sanding visible on the carpet due to deterioration of the stone (mainly low level) behind the curtain/fabric hangings. Cracking noted to stonework mainly at higher level over the hangings, although there is cracking to the South side of this wall at lower level. Some deterioration in the condition of the stonework at higher level, with possibly some open joints which may warrant closer inspection in due course</p> <p>South Wall – for condition of columns see Nave</p> <p>Storage area – Exposed stone walls, thin partitions to East and south, stone flags to floor with one section of timber boarding, exposed boarded ceiling. Lots of stored items, but well ordered, however, the stored items and cupboards etc. concealed some of the walls. Stone floor slightly uneven with isolated hungry/open joints. To the North wall there is cracking to the right hand reveal up to lintel</p>	<p>Cracking to be inspected by a structural engineer along with other areas and a programme of repairs based on urgency of action drawn up</p> <p>Carry out works to cracks as advised by the engineer or point with lime mortar and visually monitor if no other work is required</p> <p>Descal areas of deteriorating stonework including to the East wall and inspect condition on completion – the hangings may be trapping dampness as the air cannot circulate behind the fabric so options for modifying this may need to be considered</p>	<p>C</p> <p>C</p> <p>C</p>
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7. Southern Chamber		Deterioration to the stonework was noted to visible sections of the external walls with loss of the original face of a number of stones. With open joints to walls and window surround. Salt efflorescence noted to cill and one wall	Repoint open joints with lime mortar Gently brush salts from affected stonework and repeat if they reappear	C B then M
8. Organ Chamber (North)		No access		

<p>9. Chancel</p>	<p>Exposed stone walls with boarded vaulted ceiling and exposed roof trusses. Tiled floor with stone steps to altar</p>	<p>North wall – To the right-hand side of the vestry door and to the wall running Eastwards there is significant sanding and spalling of stonework mainly at lower level with some salt efflorescence. There is a significant crack over the window into the wall over and to the left-hand reveal. Issues with damp penetration were noted mainly at cill level but also to the upper right-hand side of the wall. Some damage to ashlar stonework which will benefit from deshaling in the short-term but may need more substantial repair or replacement in the future.</p> <p>East Wall – There are significant issues visible on this wall reflecting the external condition noted earlier in the report. Cracking is visible around the head of the arch and there is cracking/movement to the window surround itself with daylight visible around some of the upper glazing. Stonework is deteriorating and spalling and there is cracking, and open joints noted on the North side of the wall. At higher level although visibility was poor, it appears that some stones are out of alignments and there are signs of movement in areas where concerns were noted externally. Cracking was also noted to the carved stonework and to the junction of this with the wall. Concealed by wall hangings/curtains the lower sections of the walls the stonework is not in great condition with open joints, deteriorating and sanding stones and cracking, There is also signs of movement with cracking to both corners at the junction with the North and South walls</p>	<p>Cracking to be inspected by a structural engineer and a programme of repairs based on urgency of action drawn up</p> <p>Carry out works to cracks as advised by the engineer or point with lime mortar and visually monitor if no other work is required</p> <p>Gently brush salts from affected stonework and repeat if they reappear</p> <p>Deshale stonework where required and repoint other open joints using lime mortar</p> <p>Carry out works to floor tiles to relay loose tiles and repair/stabilise the worst of the damaged tiles if these are deemed a trip hazard</p> <p>Carry out repair to loose mortar under the screen</p> <p>Repoint open joints to steps using lime mortar</p> <p>Consider options to allow air circulation behind the curtains</p>	<p>A</p> <p>B</p> <p>B</p> <p>B for East wall, C elsewhere</p> <p>B for loose tiles, C for remainder but monitor</p> <p>B – C</p> <p>D</p> <p>E</p>
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<p>Chancel continued</p>		<p>South Wall – some loss of pointing and resultant open joints and the remains of strap pointing is coming loose in a few locations. At lower level there is salt efflorescence and deterioration of stonework with salts also visible at higher level over the organ pipes. Salts, sanding stonework and loose pointing is visible to the window reveal and potential cracking to the left-hand reveal, although this is difficult to tell given the condition of the stone and pointing generally. Salt efflorescence noted below cill level in the same location</p> <p>West Wall – see Nave</p> <p>Floor - Loose pointing/repair under screen needs to be rectified and there are loose tiles, cracked and raised tiles in a number of locations. Near the vestry door there are also a number of cracked tiles. Possibly partly sunken. Minor open joints to steps and hungry joints to the edge of the altar dais</p>		
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<p>10. Vestry</p>	<p>Painted plastered walls and ceiling. Carpet tiles to floor</p>	<p>North wall – plaster below sink, and separate tap cracked and damaged. There is no gulley or bucket below the tap</p> <p>East Wall – significant damage to plaster at lower level including to wall under timber window cill. There is also bulging and poorly adhered plaster to the window reveal. This area may need stripping back to bare stone and being allowed to dry out, before replastering with lime plaster in the future.</p> <p>South Wall – reveal is in similar condition to that noted on the Cancel side. Much of the wall is concealed so could not be fully inspected</p> <p>West Wall – cracking visible over alcove with resultant damage to plaster/paint. With hairline cracking elsewhere. Slight mould growth</p>	<p>Provide a means to catch and drips from the tap</p> <p>Deshale/brush salts to affected stonework</p> <p>Carry out plaster repairs using lime plaster to areas of damaged plaster, exposing the stonework and allowing the areas to dry out if required before replastering. Inspect and rectify areas of cracking prior to replastering</p>	<p>A</p> <p>B then M</p> <p>C</p>
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External Areas/Churchyard

		<p>Although the churchyard is closed and the responsibility of the Local Authority some issues were noted in the immediate vicinity of the church.</p> <p>To the West end there is a broken plastic cover to a rodding point or similar.</p> <p>The main gates are rusty and unlikely to be easily closed if required. The right gate may need rehangng. Both gate piers need attention either repointing and the capping to the Eastern posts is possibly loose and gate post split.</p> <p>The tarmac path is in poor condition and deteriorates as you near the church entrance. The tarmac is cracked, breaking up and vegetation is starting to take hold in a number of areas and needs replacing to provide safe access to the church. In addition, it is a frequently frequented churchyard,</p> <p>To the East end of the church the boundary wall to the neighbouring property has ben blocked with concrete blocks and left unfinished which is not the most attractive finish and the condition of the pointing to the associated walls is variable.</p>	<p>Consult with the Local Authority to discuss the most pressing repairs to paths and walls etc. close to the church and potentially discuss with the neighbours options for finishing the blocked up opening in a more aesthetically pleasing manner.</p> <p>Replace cover to rodding point/services and reset slightly so it is not damaged by grass cutting</p>	<p>B</p> <p>B</p>
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Photographs



Salts visible to West Elevation of South porch



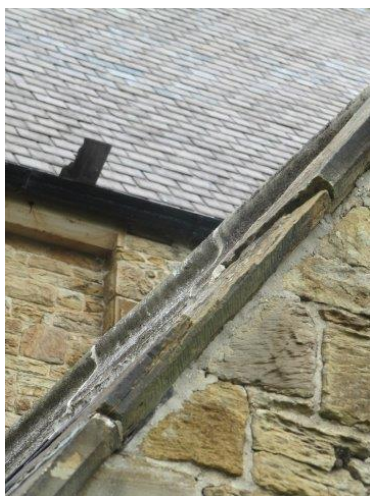
Salts, open joints and weathered stonework to West Elevation of porch



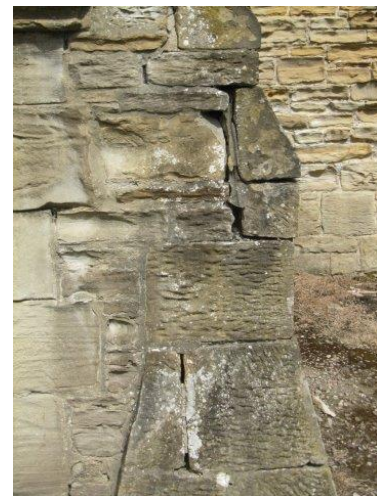
Salts visible to West Elevation of South porch



Deep cavity to South Porch wall



Damaged stonework to water Table of Porch Open joints and loose stonework to porch





Hungry/open joints to East buttress of porch



Deep cavities, open joints and weathered and missing stonework to East elevation of porch



Exposed wall plate and open joints to South elevation of South Aisle



Loose and missing stonework to South Aisle and missing section of downpipe

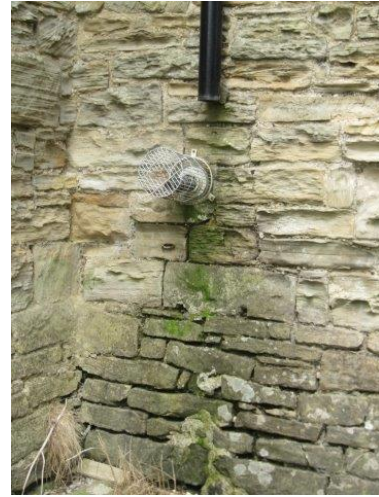


Weathered stonework exposing wall plate and loose/missing stonework to East end of South Aisle





Open joint to water table and cracked mortar under to East Elevation of South Organ Chamber



Missing section of downpipe and resultant Algal growth and open joints to South Elevation of Chancel



Damaged and rusty window guarding and resultant rust stained wall to Chancel

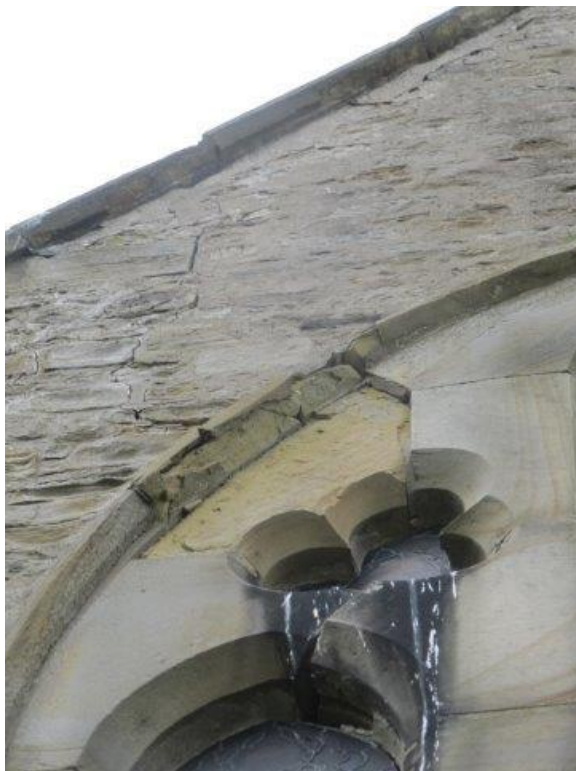


East Elevation of

Chancel

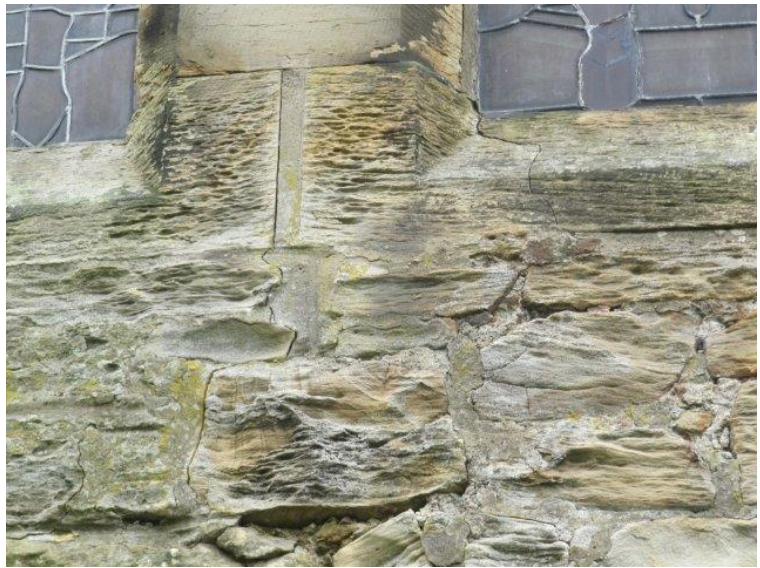


East Elevation of Chancel



Open joints, cracking and damage to stonework to the east window, East elevation of

Chancel



Cracking and missing mortar to East Elevation of Chancel under the window



Cracking and loose mortar to east Chancel window



Crack and sapling to North Elevation of Chancel



Damaged timber cladding to stairs



Cracked mortar around heater flue to East of vestry



Damaged paintwork to door to old boiler room



Dislodged vent



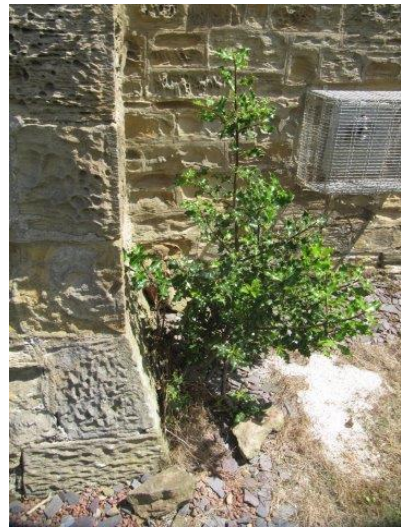
Damage to stonework to mullions of Northern Windows sheltered by window protection



Cracking/open joints to West end of North Elevation of Aisle



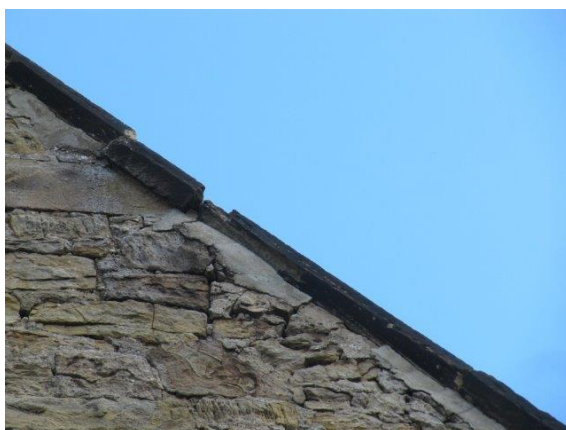
Cracked pointing and open joints to West Elevation of North Aisle



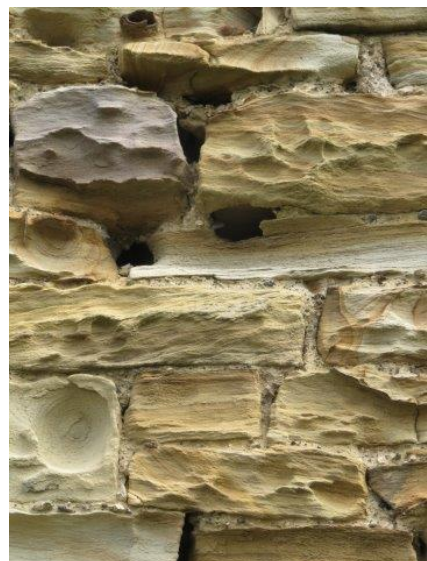
Holly growing at base of west Elevation



Damaged section of water table, cracking mortar, open joints and weathered stonework to West Elevation of Nave



Damaged section of water table, open joints and, cavities and weathered stonework to



West Elevation of South Aisle



Open joints and cavities to West Elevation of South Aisle



Examples of weathered stonework from two different locations - some of the worst affected stones may need replacing, the extent of this will depend on the depth of stone used, others could be repaired where appropriate using mortar repairs



Cracking to side of mortar fillet to porch



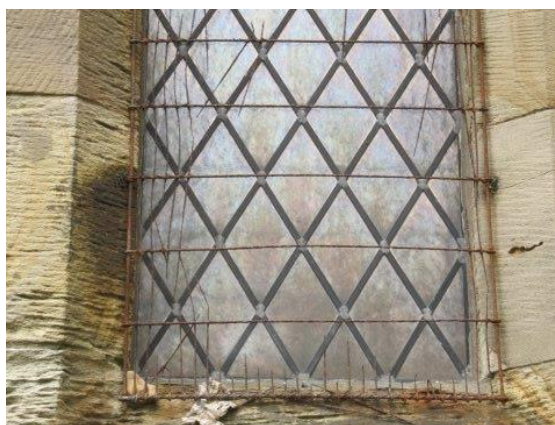
Lifted flashings to Nave roof (South)



Lifted and damaged flashings to North Nave roof Slipped slates to South Aisle roof



Missing and cracked mortar fillets to roofs on South Elevation



Slate fragments in shoe to downpipe on North Elevation of North Aisle

Rusting and damaged window guarding to Eastern window of the South organ chamber



General View of the nave looking Eastwards



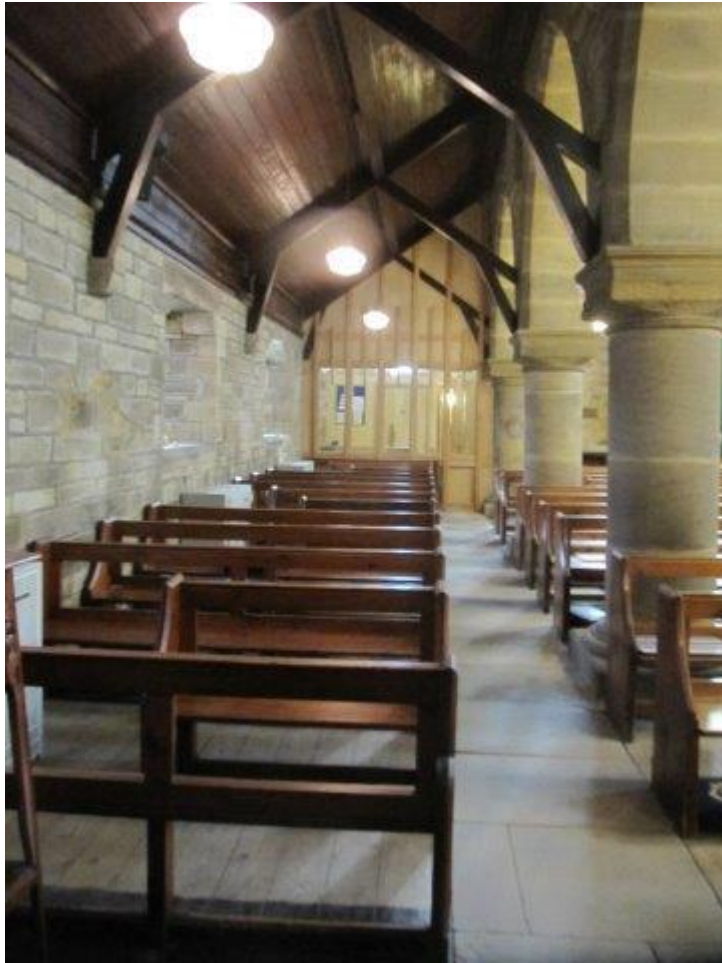
Chancel looking Eastwards



General View of the nave looking Westwards



North Aisle looking West



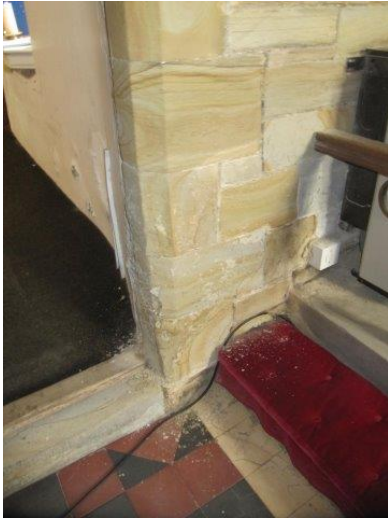
South Aisle looking West



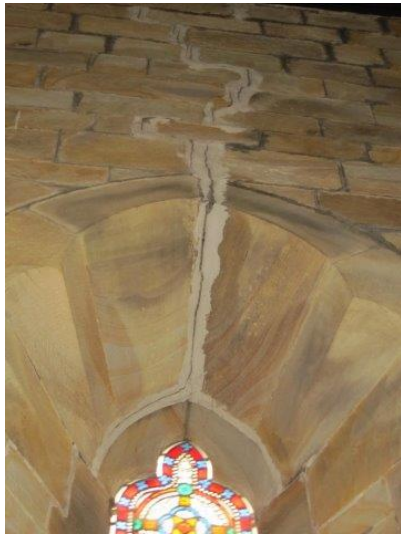
Damaged stonework behind curtain to East wall of North Aisle



Sanding stonework to South Organ Chamber



Damaged stonework and salt efflorescent to North wall of Chancel



Previously repointed cracking (now opening up) to North wall of Chancel



Cracking to carved stonework behind altar



Salts, sanding stonework and loose pointing



Damaged plaster in Vestry

to the window reveal on South wall of Chancel



Damaged plaster to North and East walls in Vestry



Grass growth and cracked tarmac to West and south side of the church on the main access route



Cracked cover to West of the church

Appendix – Structural Report on the East End of the Church

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Structural Report

St Ives Church, St Ives Road, Leadgate.

Introduction

An inspection of this church was carried out following concerns raised regarding cracking to walls.

The church is traditionally stone built with a duo-pitch roof constructed in timber. There is an entrance porch to the south and a naïve to the north. The church was built around 150 years ago.

Structural condition

External

The church is in reasonable structural condition with some minor defects mainly due to its age. This is with the exception to the wall to the eastern elevation.

The eastern elevation is a plane wall, without buttresses, it was noted that this was the only wall on the church without buttressing. There are three tall slender windows running from mid height to the apex peak. At the base of the windows there is a noticeable outward bulge to the wall. There is vertical cracking to the stonework either side of the bulge. There was also opening up of masonry joints to the header stones above the windows.

On the returns either side of the wall there are vertical cracks suggesting that the eastern wall is separating away from the rest of the church.

Internal

At the eastern end of the chapel there is cracking to the side walls. This cracking reflects the cracking observed externally on the returns to the eastern elevation. The centre of the wall was obscured by the organ and banners, other cracking that may be present could not be inspected.

Comments

It has been suggested that the cracking may be due to settlement. There is some vegetation close to the eastern elevation that could be affecting the foundations. However, the bulging to the stonework starts half-way between ground level and the windowsill. The lower section of the wall is relatively plumb, other than the detail at the bottom of the wall where the stonework is canted inward. This would suggest that the problem is not associated with the foundations but with the wall at mid height.

The church is in an exposed location. The eastern elevation has experienced suction from westerly winds since it was constructed. The wall arrangement with the three slender windows and no buttressing means that the wall has little lateral restraint. Over the years the wall has moved outward due to the wind loading. Now with the wall out of plumb, the self-weight of the wall itself will be contributing to the outward movement. To rectify the problem enhanced lateral restraint is required at windowsill level.

There are different means of dealing with this problem depending on consent from the conservation team. Stonework stitching and re-pointing would be beneficial although this would not improve the lateral stability. Additional stone buttresses, similar to that around the corner on the south elevation, would be the most effective option. Alternatively, an internal steel framework could be provided to restrain the wall.

Conclusion

The eastern elevation to this church is bulging and cracked. The most likely cause is wind loading over a sustained period. Additional lateral restraint is required.

The most effective means of providing restraint is to provide buttressing. This will affect the external appearance and will need to be discussed with the Planning Department and Conservation Team.

Recommendations

Consult with the Planning Department and Conservation Team to consider what measures can or can't be installed. This will provide feedback to enable a proposal to be prepared.

Brian Rickman

18th July 2020