Supporting Documentation Audlem St James – Bells

Note to parish

This bundle includes all the supporting documentation to your faculty application as required under Rule 5.5 of the Faculty Jurisdiction (Amendment) Rules 2019.

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14Correspondence between DAC office, parish and others dating from 21 August592020 to 19 May 2023

Consultation

Correspondence between DAC office and Church Buildings Council dating from21 June 2021 to 23 March 2023

Caroline Hilton, DAC Secretary

19 May 2023

We petition the Court for a faculty to authorise the following-

Please describe the works or other proposals for which a faculty is sought in the way recommended by the Diocesan Advisory Committee in its Notification of Advice.

SCHEDULE OF WORKS OR PROPOSALS

Refurbishment of Bells at St James The Great Audlem

Copies of the Standard Information Form and any drawings, plans, specifications, photographs or other documents showing the proposals must be provided with this petition.

Audlem St James Church

STATEMENT OF NEED

During 2020, following_Inspections of the Bells at Audlem St James Church undertaken independently by John Taylor and Co, Blyth and Co, and Whites of Appleton Ltd recommendations were received as follows: -

The Bell installation has done well to serve the Church over the centuries with some periodical restoration, and many of the current features have clearly surpassed their expected working life, given that they have been and are used by the Bell ringers on a regular basis. However, we can now see that the timber Bell frame is not coping with the dynamic loads of the swinging bells and is adversely affecting the tower structure as a result. Additionally, the Bell fittings are now in a rather tired condition and the timber headstocks have come to the end of their useful life. Timely intervention now would save on greater costs for any breakages and damage in the future.

Extensive repairs to the tower to repair cracks in the masonry were undertaken in the last year. The PCC now wish to undertake these recommendations.3/6/2021

St James's Church: Audlem Statement of Significance

Name: PARISH CHURCH OF ST JAMES: AUDLEM Location: The Square, Audlem CW3 0AH Grade: I Date first listed: 12-Jan-1967

A Copy of the listing description (legacy record) is included below.

St James Church, Audlem is set on a hill overlooking the centre of the village. The site is thought to have been a Celtic burial ground, and there may also have been a Saxon church here. This would have been a simple structure primarily built of wood. The present church was founded by Thomas de Aldelime in the middle of the 13th century in the reign of Edward 1st, under the jurisdiction of St. Thomas's Priory, Stafford. At the dissolution of the monasteries in the 16th century, it passed into private custodianship (or patronage). In 1896 Lord Combermere was patron and his right to select a vicar, was purchased from him by the then Vicar, Canon Atkinson, who then gave it to the Bishop of Chester. The numerous memorials erected over the centuries by various local landowners and gentry in memory of family members, perhaps indicates why the church is so richly furnished.

Likewise most of the windows were donated as a form of memorial. The different styles of window indicate quality, period made, fashion at the time and the benefactors' likes. The choice of subject is also fascinating, revealing personal links to the deceased person and theological enthusiasm of the donor. The window recognised as the finest is by Charles Kempe, whose "trademark" was a wheat sheaf; whilst a window at the rear of the church is by one of Kempe's students, James Hall and includes the letters of the name AUDLEM.

Pevsner

ST JAMES, As nearly always in Cheshire, the impression is Perp, though in this case not Late Perp, and one has to look for earlier features. They are these. First the S doorway, which cannot be later than the late C 13. One order of shafts; one capital has a head with a stiff-leaf wreath. Arch mouldings with fillets. Then Dec, i.e. first half of the C 14, the priest's doorway, the lower part of the NW tower,* and the two-light N aisle windows and S aisle windows narrower and starting lower than the present windows. The size of the C14 windows can be traced in the outer wall. Inside the C 14 is represented by the E springer of the w arch of the N arcade, indicating a nave narrower than it is now, and the W respond of the S arcade, indicating a nave very much lower than it is now. As it is now it is very high and has large S aisle windows with two-centred arches and panel tracery, a splendid clerestory of twelve closely set windows, and battlements on aisle and clerestory. The E end, N, S, and E walls is a lengthening of 1885-6, when the church was restored by Lynam & Rickman, but the chancel E window of five lights was probably re-erected. In its tracery it is exactly on the watershed between Dec and Perp, whereas a N chapel window is decidedly Late Perp. In the N aisle wall are three unexplained niches close together but of different shapes. Good roofs of the usual Cheshire type but with relatively few bosses. — FONT. Flat octagonal bowl. The panelling of the stem and base looks C17. - PULPIT. Jacobean, with the usual two tiers of blank arches, but here unusually simple. - (CHEST. C13, with iron-work.) - CHANDELIER of brass, given in I'751. — STAINED GLASS. N aisle E and one N aisle N by *Wailes*, 1857, according to Sir Thomas Kendrick. — S aisle by Kempe from 1882 (Nativity scenes) onwards, N aisle one 1893. — PLATE. Chalice given in 1635; Paten c.1635-40 (?); two Almsdishes given in 1685; Baptismal Bowl given in 1744. — MONUMENTS. Four painted heraldic tablets of the *Randle Holme* type — 1611, 1622, and 1708.

* There are squinches at the top for a spire.

Brief History of Architectural Changes

1360-1400 A chancel was added to the simple nave, the lower walls date from this period.

1500-1540 A period of great change. The north aisle was moved and the lofty clerestory windows erected with its panelled Tudor ceiling. Note hundreds of small white marks on the chancel walls where soldiers sharpened arrows on the stone before it was used in the building.

1590 The porch was altered, with a panelled ceiling added. On the stone seats of the original porch, are grooves where spears and swords were sharpened. Note the Green Man to the left of the church door, a common folk remnant of our pre-Christian past.

1609 The Jacobean pulpit, which is still in use, was added.

1895 Major restoration took place. Sixteen coats of whitewash and plaster were removed from the walls revealing, an old fresco and a niche. The box pews were removed, with some carvings retained in the chancel furniture.

1960-1975 The nave roof was restored after the ravages of the death-watch beetles. The nave aisle floor was repaired after the collapse of coffins below.

1983-1990 Urgent restoration costing almost £200,000 was put in hand – it included renewing all roof timbers and releading the whole roof, with the exception of the nave.

1991-1994 The Lady Chapel was restored, Pews were removed from the north aisle, a new floor was laid and the organ was relocated; a new nave floor was laid. The chancel floor was extended, communion rails were added and a moveable nave altar was introduced.

The Bells and Bellframe

Not much is known of the early history of the bells, St James was not surveyed by J. W. Clarke for his *Cheshire Bells*, published between 1949 and 1959. According to Audlem churchwardens' accounts, in 1735 the ringers were paid 6s. for ringing on the King's coronation day, birthday and the date of succession to the throne. There was also a payment of 6s. for ringing on 5 November. This payment suggests that it likely that there were six bells in the tower.

According to the Liverpool University transcription of parish registers for Audlem, volume 3, beginning 1665:

The Bells of Audlem church were new cast and a sixth Bell added at the charge of the Parish while the Reverend Mr Jenks was vicar, Mr Bayley of Parks and Mr Dutton of Butterley Heys Churchwardens in the year 1737.

This strongly implies that there were five bells before the Rudhall bells were installed. Further, according to the churchwardens' accounts, the price of a set of new bell ropes in 1735 was 10/3 (ten shillings and three pence), whereas in 1737 it was 12/0 (actually, £01/04/00 for two sets), again implying that the number of bells had increased from five to six.

Audlem bells were cast in 1736 by Abel Rudhall of Gloucester, and hung in an oak frame by Mr Snead (probably John Sneyd, who also hung bells at other towers in the area.

According to the Churchwardens' accounts for 1736, which say "Paid for carriage of bells to Salop and for assistance to unload the same and from Salop to Glocester £04/05/00" the old bells were transported to Shrewsbury and shipped down the Severn to Gloucester on a barge. The new ring of bells is listed in the Cheshire section of the Rudhall bell list of 1751, between Frodsham (a ring of six bells cast by Abraham Rudhall II in 1734) and Barthoml[e]y (a ring of six bells cast by Abel Rudhall in 1743). In a wider context, the ring of bells at Audlem is the earliest *surviving* complete ring of bells by Abel Rudhall, who took over the foundry at Gloucester in that year. (It is the oldest *surviving complete* ring, but may not have been the first: Rudhall cast at least two other rings in 1736, perhaps before the Audlem bells: Kington, Herefordshire, six bells of which only four survive; and Walton on the Hill, Lancs, six bells all recast at a later date.)

The six bells all have inscriptions. The weight, musical note, diameter and inscription for each bell are given below. (The spelling is taken from the bells; and the estimated weights are given in hundredweight (cwt): 1cwt is about 50Kg.)

- Treble 4.25cwt, F#. 27.60" When you me ring, I'le sweetly sing
- 2nd 4.5cwt, E. 28" Peace and good neighbourhood
- 3rd 5cwt, D. 29.5" Prosperity to this parish
- 4th 5.5cwt, C#. 30.5" May the Church of England for ever flourish
- 5th 7cwt, B. 33" Abel Rudhall of Glocester cast us all
- Tenor 9cwt, A. 37.25" I to the church the living call and to the grave do summon all

Work was also carried out on the bell frame, the accounts show that a Mr Snead was responsible for the carpentry work and hanging the bells. The contractor was probably the John Sneyd who hung the new bells at Newcastle under Lyme in 1732, also possibly related to the Thomas Sneyd of Madeley who made the frame for Stone, Staffordshire, in 1757. However, the detail of the frame at Stone bears no resemblance to that at Audlem.

In September 1867 a Memorandum of agreement was recorded between the ringers and the church authorities.

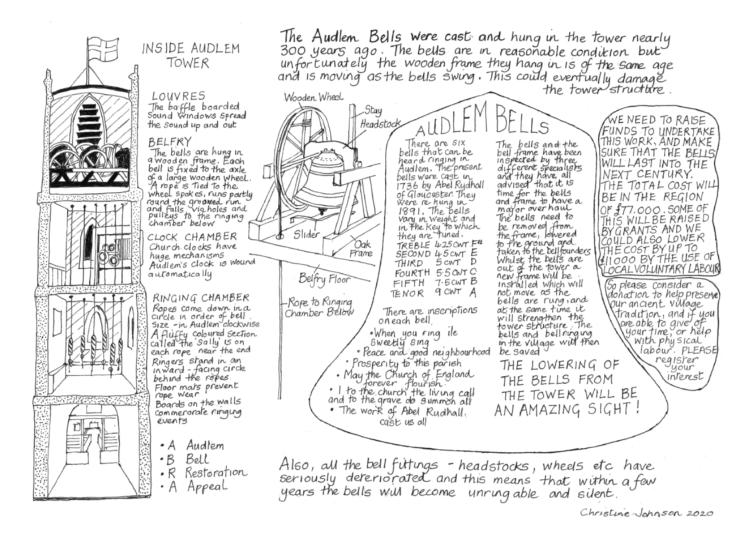
'Memorandum of Agreement between the Vicar, Churchwardens and Bellringers of the parish Church of Audlem The Vicar and Church wardens on their part bind themselves and agree that the Ringers should on every fair and just occasion have the free use of the Bells without hinderance or molestation on their part. The Ringers on their part bind themselves and agree to Ring the Bells on every occasion they may be required for Church Service. Dated this 6th Day of September 1867.'

In 1891 the bells were rehung in the same frame, with new fittings. *Bell News* on Saturday 19 December 1891 reported

'THE CHESTER DIOCESAN GUILD. The bells at Audlem parish church, Cheshire, have been rehung and quarterturned with new head stocks, wheels, etc., by Messrs. Taylor, of Loughborough. On the very kind invitation of the Vicar, Canon Atkinson, the Crewe society joined the Audlem men in the re-opening on Saturday, the 5th instant. They were rung muffled first, as a mark of esteem to the late Lord Combermere, and after the muffles were removed change-ringing was attempted, but much could not be done as some of the bells were not all that could be desired, but the bellhanger being present he quickly made the alteration required, but when this was done it was time for tea, when the visitors and friends did ample justice to an excellent repast provided by the Vicar at "The Lamb" inn. After tea the Crewe ringers rang a few tunes on the handbells, when the tower bells were again started, and several touches of Grandsire Minor and Doubles were rung by mixed bands. The ringers expressed themselves satisfied with the go of the bells. It is to be hoped that now they are in good going order Audlem will soon have a skilled company of change-ringers.'

After Taylor's work in 1891, no significant work was carried out on the bells until 1996/7. In the autumn of 1996 three of the bells were provided with new ball bearings and pulleys, and the clappers were refurbished, and the other three bells were similarly treated in the early part of 1997. This work, which cost about £5,500, was covered by donations raised from sales of the Abel ringing program

The bells are still in reasonable condition but the frame and fittings now need complete refurbishment.



Current proposals

In 2020 an inspection by three different specialists recommended that it is time for the bells and frame to have a major overhaul, to prevent them becoming unringable in a few years. The bells need to be removed from the frame, lowered to the ground and taken to the bell founders, where they will be refurbished and given a complete new set of fittings.

When modern bell fittings were first introduced to the bells by Taylors at Loughborough in the late 19th century, the hollow box section cast iron headstock brought about a considerable improvement in the ease with which bells could be rung compared with timber headstocks that preceded them. The headstocks were very carefully and cleverly designed to give a very good weight relationship to the bells that hung from them.

When the bells are removed from the tower, major problems with the bell frame must be resolved. The frame is moving as the bells swing. It may be possible to save the frame, by strengthening and perhaps underpinning it, or it may have to be replaced. A report from a structural engineer was provided, and this informed proposals to strengthen the frame.

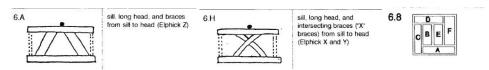
The bells were originally cast with loop canons, but these were all removed in 1891 by Taylors during a refurbishment of the bells and fittings. Five of the bells have been tuned at some point, although they have never been machine tuned.

The bells hang on a frame that is either of the same date as the bells, or substantially of this date incorporating older elements. As 1736 was the first year that Abel Rudhall traded, the complete 1736 Audlem ring and coeval timber frame are of high significance as work from a particular early stage in the work of this founder. Although Rudhall's work is well-represented in Gloucestershire and adjacent counties, it is rare in Cheshire. Although the bells and frame are currently unlisted, the Church Buildings Council considered that the bells and frame are worthy of listing due to their age and completeness and declared that this is a significant ring.

The bell ringers are relatively content with the historic sound of the bells and are more concerned with replacing the bell wheels and other fixtures, thus making the bells safer and easier to ring.

It was originally proposed to tune the bells. Since the bells are of one date and show no signs of modern tuning. the bells are tonally significant as the early work of their founder and, although not proven, extremely likely to be tonally as installed in 1736. There is no reason not to consider that the tuning was applied soon after the bells were cast. The CBC strongly advised against their tuning on account of tonal significance and nothing about the sound of the bells suggests that there is a strong case for tuning.

According to Pickford's categorisation, as recorded on Doves Guide by John Arthur of the CBC Bells Committee, the bell frame is formed with truss types 6A and 6H in a 6.8 layout



John Arthur also noted that the bell frame actually consists of two independent frames of the same date, with 1,2 in one part and 3,4,5,6 in the other, but they are nonetheless built to be associated with each other.

The bottom sills of the frame sit on the belfry floorboards, which run east west. These are, in turn, supported by the east and west walls and two substantial timber beams above the clock chamber which run north south and are supported in pockets in the north and south walls.

The bell frame has been strengthened in the past in an effort to reduce movement caused by the bells being rung full circle. Horizontal ferrous metal straps have been fabricated and screwed into the tops of the top sills at all of the frame joints. Observations made when all six bells were rung full circle revealed that differential horizontal movement was occurring between the top sills and the tower walls. This was a maximum of approximately +/- 1.5mm in the north south direction and +/- 1mm in the east west direction, indicating that the strengthening measures have not been entirely successful. It should be noted that there are no vertical tie rods connecting the top and bottom sills, which would have been normal in more recent timber bell frames

In general, the bell frame members are adequate and in fair condition, consistent with their age. The top sills have been cut out in places to allow the bells to swing freely and, although this has reduced the original cross section, there is no evidence of any significant structural distress, nor any significant differential movement at the frame joints

The ends of the bell frame support beams were observed from below with all six bells being rung full circle. Minor differential vertical and horizontal movement was noted at all four bearings in the walls, indicating that there is not full contact between the soffits of the beams and the masonry which supports them. Close to the bearing points, the beams have been bolted to the bottom sills of the bell frame. Just below the timber beams, horizontal ferrous metal tie bars have been installed close to all four internal elevations. The ends of these bars extend through the walls of the tower and are secured by pattress plates which are evident externally.

The structural engineer, Adrian Dempster noted that there is no evidence that the ringing of the bells full circle has caused any significant detrimental effects on the tower walls

In order to facilitate the repair and strengthening of the frame, a full survey of the frame was undertaken. Site drawings were made on 15, 16 and 17 March 2022 by Dr.J.C. Eisel *FSA*, assisted by Mrs. M. P. Eisel. The bells were still *in situ*, therefore it was more difficult to record the frame as not all parts were accessible, and in places it was not possible to take running measurements.

The Clock

According to the churchwardens' accounts, there has been a clock in the tower since the early eighteenth century, and quite possibly earlier. Mr. Snead was paid 15s. for repairing the clock case in 1736, which was likely damaged in the rehanging of the bells. The present clock is by local firm, Joyce of Whitchurch, installed in 1911 in commemoration of the Coronation of King George V and Queen Mary. The iron clock face on the west side of

the tower probably dates from the time that this clock was provided, rather than the nineteenth-century date stated in the listing details.

The clock is of flat-bed type, and has three trains, the quarter strike being the Westminster chime. It lies against the west wall of the tower and is regulated by Grimthorpe's double-legged gravity escapement. The clock is housed in a contemporary enclosed clock case, with glazed doors through which the movement can be seen. In modern time this has been altered to being driven by an auto-wind system, using small weights rather than the very heavy former weights. The former weights were held in chutes in the north-west and south-west corners of the tower, and, although redundant, these still remain. They are fenced off on either side of the clock case.

Sources

- 1. Historic England Listing 12/01/1967
- 2. Christopher Pickford Bellframes a practical Guide to Inspection and Recording 1993
- 3. Nikolaus Pevsner The Buildings of England Cheshire 1998
- 4. ABRA Appeal leaflet September 2020
- 5. Ward Cole report April 2021
- 6. CBC Advice 17/12/2021
- 7. Dr John Eisel Record of Bell frame March 2022
- 8. Taylors report 30/12/2022
- 9. Doves guide 09/01/2023
- 10. Audlem Churchwardens' Accounts, 1735-37 (Chester Record Office)
- 11. Parish Registers of Audlem, 1665 onwards (Liverpool University transcription)

St James's Church: Audlem Statement of Significance

Name:PARISH CHURCH OF ST JAMES: AUDLEMLocation:The Square, Audlem CW3 0AHGrade:IDate first listed:12-Jan-1967

A Copy of the listing description (legacy record) is included below.

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The present church was founded by Thomas de Aldelime in the middle of the 13th century in the reign of Edward 1st, under the jurisdiction of St. Thomas's Priory, Stafford.

At the dissolution of the monasteries in the 16th century, it passed into private custodianship (or patronage). In 1896 Lord Combermere was patron and his right to select a vicar, was purchased from him by the then Vicar, Canon Atkinson, who then gave it to the Bishop of Chester.

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Brief History of Architectural Changes

1360-1400 A chancel was added to the simple nave, the lower walls date from this period.

1500-1540 A period of great change. The north aisle was moved and the lofty clerestory windows erected with its panelled Tudor ceiling. Note hundreds of small white marks on the chancel walls where soldiers sharpened arrows on the stone before it was used in the building.

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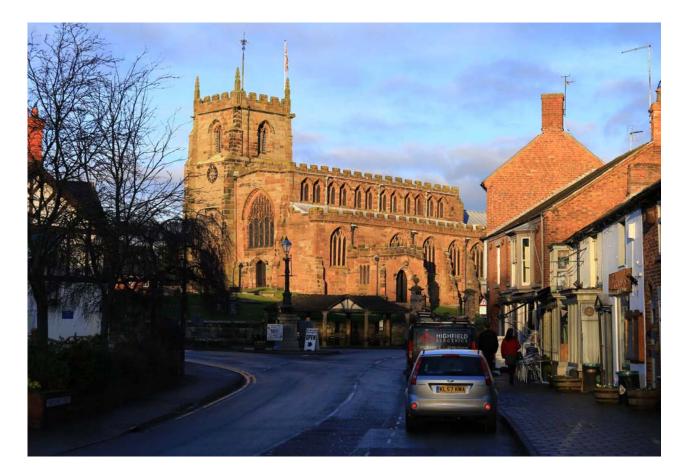
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8699 | Audlem Parish Church





2000-2009 A kitchen & toilet under the tower, and a new screen to Lady Chapel and West Door Porch were all added. The building continues to be developed to meet the needs of the worshipping community. It seeks to hold together continuity and development, which is the nature of our Christian faith.





8699 | Audlem Parish Church

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Current Proposals

Repairs and strengthening work to the bell frame have been identified as being necessary. To enable the work to be undertaken, the bells need to be temporarily removed and lowered to ground. Currently there is no opening in the bell ringing chamber floor to enable the bells to be lowered, indicating the floor was replaced in 1891 when the bells were known to have been re-hung. The joist sizes and spacing are very regular as are the floor boards which tends to confirm these are Victorian replacements. By comparison, the clock chamber floor is made up of very wide oak boards of a much earlier date. A suitable opening through the clock chamber floor still exists.

Floor boards and joists in the ringing chamber floor will be partially removed temporarily to enable a permanent hatch to be constructed using the existing fabric.

8699 | Audlem Parish Church



Legacy Record (published by English Heritage)

Grade: I

List Entry Number: 1136872

AUDLEM C.P. STAFFORD STREET SJ 64 SE 8/18 Church of St James 12-1-67 GV I Church. Perpendicular incorporating late C13 and early C14 remnants with further C19 additions and alterations of 1855-6 by Lynam and Rickman. Red sandstone ashlar with a lead roof. Aisled nave, chancel and north western tower with a south-western porch. Tower: western face has angle buttresses with offsets. Two-light lower window with trefoil headed lights and a quatrefoil to the apex with a hood mould. Above this are set two quatrefoil lights and above them a C19 clockface with an iron outer ring. The stone centre bears an inscription J Hervey/J Gouldborne S. The girth of the tower diminishes above this via an offset and the two-light belfry opening has a casement moulding to the surround and two louvred lights with trefoil heads and a quatrefoil to the apex with a hood mould above. There are gargoyles to the angles and a battlemented parapet with crocketed pinacles at the corners. The north face has no windows to the lower level, two lancet windows at the level of the clockface and is similar to the western face at belfry level and above. The eastern and southern faces adjoin the nave and project only at belfry level and above where they are similar to the western and northern faces. Nave: western-end: 4-centered doorway to the inner body above which is a 5-light C19 window with plate tracery and a hood mould. Battlemented parapet to the gable above. At right is a buttress with offsets and the blank end wall of the southern aisle. South side: 6 bays divided by buttresses with offsets. The second bay from left has a superimposed C15 or C16 gabled porch with diagonal buttresses, a central doorway with double chamfered surround and hood mould. To either flank are 3-light cusped windows with flat heads and Tudor hood moulds and there is a battlemented parapet above. Within the porch is a late C13 doorway with pilarettes to either side supporting capitals, that at left carved with a mask. Roll moulding with fillet to the arch and hood mould above with figurehead label stops. The aisle windows to either side are of 4 cusped early Perpendicular lights with hood moulds and replace windows of less width which fell lower in the wall as the stonework shows. Battlemented parapet above. The clerestory has 12 windows arranged in pairs corresponding with the aisle bays. Each window has 2 cinquefoil-headed lights with a quatrefoil to the apex. Paired hood moulds above and a battlemented parapet. The northern aisle has a vestry of 1885-6 at right and 3 bays to left each of 2 cusped lights with quatrefoils above. The aisle roof was originally of higher pitch as shown by the marks in the stonework of the east face of the tower. The clerestory here is of 8 lights arranged in pairs. The eastern end of the southern aisle has a C19 window of 4 Perpendicular lights with cusped heads and a hood mould above. The north aisle has a Perpendicular window of 5 lights with a square head. This window appears to have been curtailed when the gable of the aisle roof was lowered. The chancel has to its southern side a priests door of Decorated form and early C14 date with an ogee head and hood mould. To the left and above at the right are 3-light Perpendicular windows. The chancel, which was extended in 1885-6 at right, has a blank southern wall. The northern chancel wall is blank. The eastern end has a reset early Perpendicular window of 5 cusped lights with panel tracery above set in a 4-centered arch. Interior: southern nave arcade of 6 arches having octagonal piers with splay caps and hood moulds. The pier which abuts the western wall has a capital set in the lower body of the pier indicating the original height of the springing of the arcade. The northern arcade of 4 arches is similar and has to its western end, set in the lower walling of the tower, the springing of an earlier arch which shows the nave to have been less wide. Hollow chamfered surrounds to the clerestory lights. Wooden panelled nave roof with heavily moulded beams, probably originally having more ornamental bosses. Octagonal pulpit of C17 but altered in the C19 and heavily cleaned. Wall memorial in chancel by B BROMFIELD/LIVERPOOL to Nathaniel Wettenhall of Hankelow d. 1778 in white, grey and yellow marble with an aedicular surround and coat of arms below in rococo cartouche.

8699 | Audlem Parish Church





STRUCTURAL REPORT

Client: St James the Great, Audlem, PCC

Project : Inspection of the existing bell frame

Job No.	:	24_1235
Revision	:	
Date	:	April 2021
Engineer	:	Adrian Dempster



NG16 6BU Tel 07971 142829

REPORT OF A STRUCTURAL INSPECTION OF THE BELL FRAME AT THE CHURCH OF ST JAMES THE GREAT, AUDLEM, CHESHIRE

1.00 INTRODUCTION:

- 1.01 At the request of the PCC, the church was visited on Wednesday 7th April 2021 for the purposes of carrying out a structural inspection of the existing bell frame and its supports. Advice had been sought by the church on any necessary repairs or strengthening measures required prior to the existing six bells being part turned and rehung with new ringing fittings. This report relates specifically to the existing bell frame and its support beams and the effects on these when the bells are being rung full circle.
- 1.02 Details within this report are confined to the structural aspects as detailed in paragraph1.01 above. The report does not constitute a full building survey and excludes certain items such as those listed below.
 - a) The decorative condition of the tower.
 - b) The condition of the tower with respect to dampness, dry rot, timber infestation and the like.
 - c) The condition of services.
 - d) The condition of roof, floor, wall and ceiling coverings.
- 1.03 No testing of materials, monitoring, breaking out or long-term investigation has been undertaken. We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the structure is free from defect.
- 1.04 The church is listed Grade I. The oak bell frame, which is considered to date back to at least 1736, when the existing ring of six bells was installed, has been described in detail by three firms of bellhangers who have inspected it and the description is, therefore, not repeated here.

- 1 -

2.00 OBSERVATIONS:



- 2.01 There is a ring of six bells, tenor weight approximately 9cwt, hung for full circle ringing in a timber frame at belfry level. As noted above, it dates from 1736, or possibly before. The bottom sills of the frame sit on the belfry floorboards, which run east west. These are, in turn, supported by the east and west walls and two substantial timber beams above the clock chamber which run north south and are supported in pockets in the north and south walls. Plans of the bell frame and its supporting beams are given in Appendix A to this report.
- 2.02 Clearly, the bell frame has been strengthened in the past in an effort to reduce movement caused by the bells being rung full circle. Horizontal ferrous metal straps have been fabricated and screwed into the tops of the top sills at all of the frame joints. Observations made when all six bells were rung full circle revealed that differential horizontal movement was occurring between the top sills and the tower walls. This was a maximum of approximately +/- 1.5mm in the north south direction and +/- 1mm in the east west direction, indicating that the strengthening measures have not been entirely successful. It should be noted that there are no vertical tie rods connecting the top and bottom sills, which would have been normal in more recent timber bell frames.
- 2.03 In general, the bell frame members are adequate and in fair condition, consistent with their age. The top sills have been cut out in places to allow the bells to swing freely and, although this has reduced the original cross section, there is no evidence of any significant structural distress, nor any significant differential movement at the frame joints.



North West

North East



South East

South West

2.04 The ends of the bell frame support beams were observed from below with all six bells being rung full circle. Minor differential vertical and horizontal movement was noted at all four bearings in the walls, indicating that there is not full contact between the soffits of the beams and the masonry which supports them. Close to the bearing points, the beams have been bolted to the bottom sills of the bell frame. Just below the timber beams, horizontal ferrous metal tie bars have been installed close to all four internal elevations. The ends of these bars extend through the walls of the tower and are secured by pattress plates which are evident externally. In the case of the western beam at its northern end, the vertical bolt is too long and touches the tie bar below, causing some minor vertical deflection of the tie bar when the bells are rung full circle.

It should be noted that there is no evidence that the ringing of the bells full circle has caused any significant detrimental effects on the tower walls.

4.00 DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS:

4.01 In view of the fact that the vertical through bolt connecting the western beam to the bell frame above at its northern end is touching the horizontal tie bar below, it is recommended that the end of the vertical bolt is cut short by approximately 15mm so that it is no longer in contact with the tie bar. This work should be carried out as soon as possible.

It is also recommended that, in the short term, steps are taken to ensure better bearing conditions where the beams are socketed into the walls. This could possibly be achieved by inserting thin slips of slate between the bottoms of the beams and the masonry below.

- 4.02 In the longer term, it is recommended that the bell frame support beams are more rigidly fixed to the tower walls, using fabricated and galvanised mild steel brackets, through bolts and resin anchors. A suggested detail is given on sheet SK/080001740900 endix A to this report. This will prevent any differential movement occurring between the beams and the tower walls when the bells are rung full circle. Where possible, the beams should also be connected to the bottom sills of the bell frame with galvanised vertical through bolts where the beams and sills intersect.
- 4.03 In order to reduce the differential horizontal movement between the top sills of the bell frame and the tower walls, it is recommended that substantial galvanised angle brackets are installed and fixed with horizontal through bolts and plates to the vertical faces of the top sills of the bell frame at their intersections. This is a common detail and your chosen bell hanger will be able to fabricate and fix these. Consideration should also be given to installing galvanised vertical tie bolts washer plates and nuts to connect the top and bottom sills of the bell frame where possible. It may also be necessary to install hardwood packs to fill any gaps which exist. Again, your chosen bell hanger will be able to advise on this.
- 4.04 All the existing ferrous metal straps fixed to the top sills of the bell frame should be cleaned down to remove all traces of corrosion and painted with a suitable paint system. The screws connecting them to the top sills should also be tightened and/or replaced where necessary. The ferrous metal tie bars in the clock chamber should also be treated and painted in the same way.

- 4 -

4.05 It should be noted that it is very difficult to eliminate movement entirely to timber bell frames when the bells they contain are rung full circle. However, it is considered that, if the above recommended measures are carried out, and the bells are rehung with new ringing fittings, the movement should be reduced to an acceptable level.

FOR AND ON BEHALF OF WARD COLE

AA.

A DEMPSTER, B.Sc., C.Eng. M.I.Struct.E. M.I.C.E.

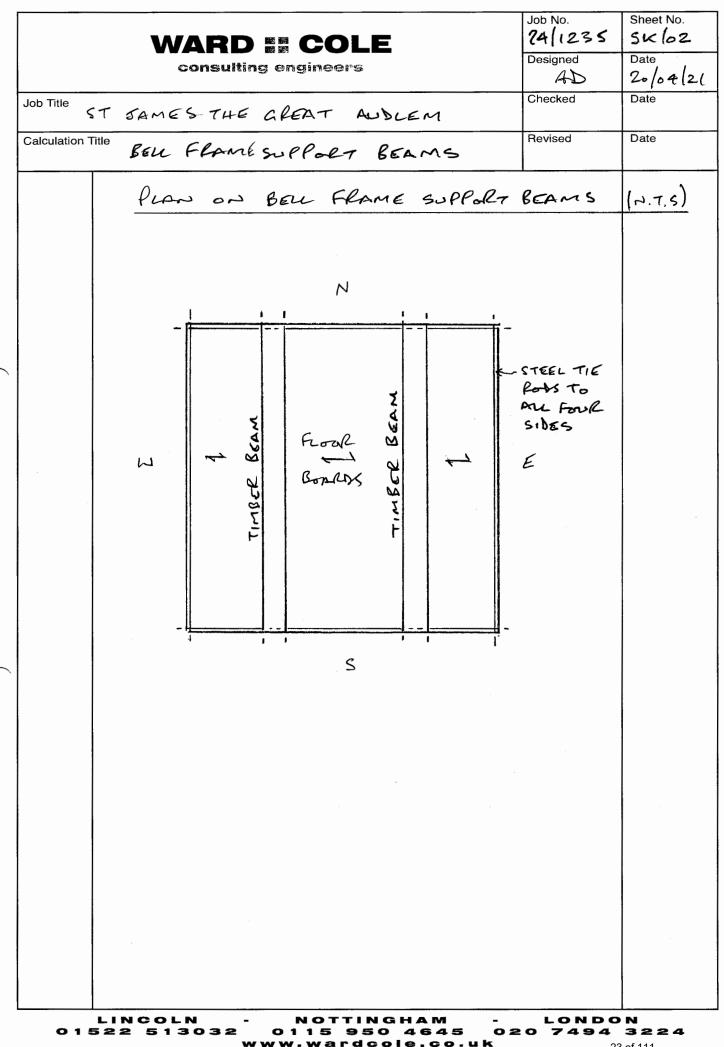
APPENDIX A

Plan on Existing Bell Frame

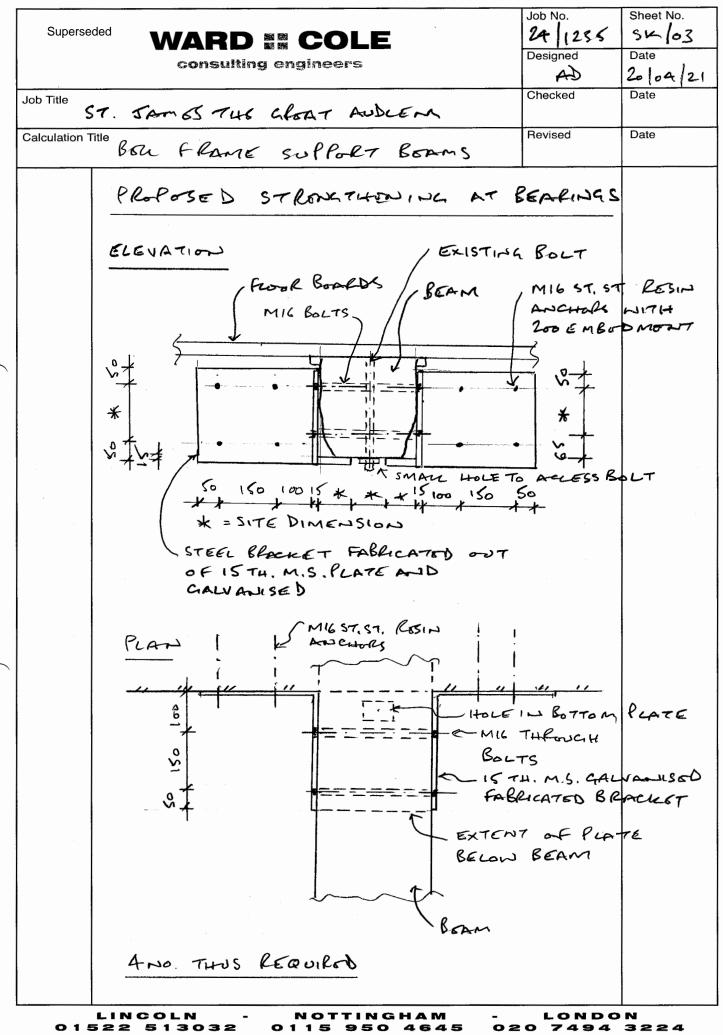
Plan on Bell Frame Support Beams

Details of Proposed Strengthening Measures

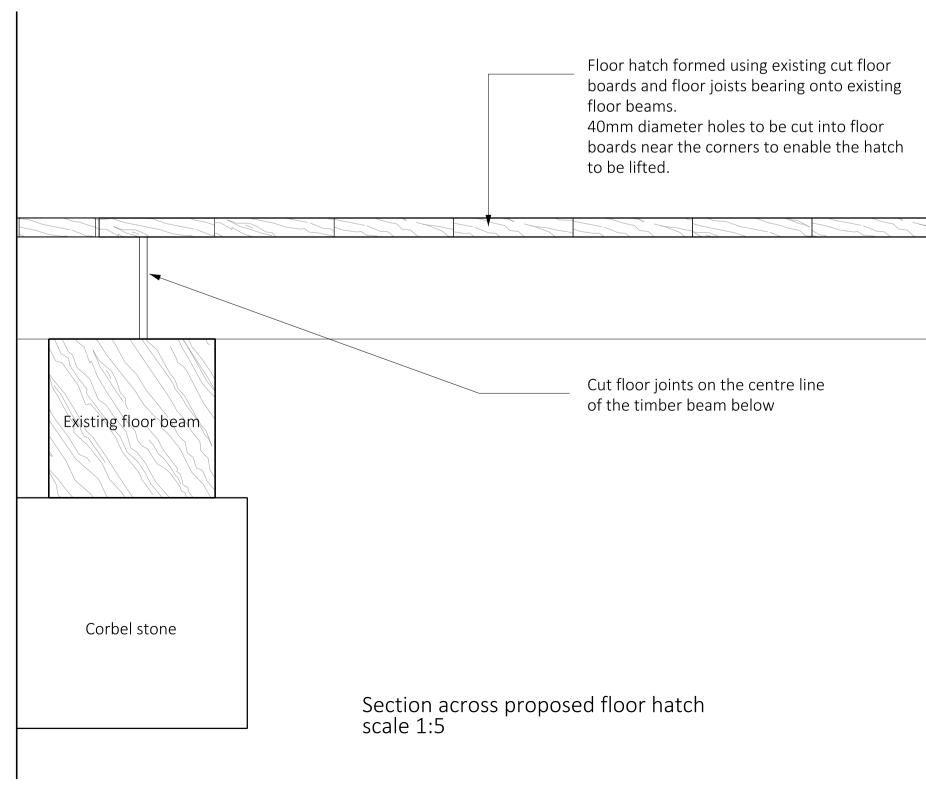
Job No. Sheet No. 24/1235 SK/01 Designed Date consulting engineers 03/04/21 AN Date Checked Job Title ST. JANES THE GREAT ANDLEM Revised Date Calculation Title EXISTING BELL FRAME PLAN ON BELL FRAME (N.T.S.) N W · E ९ S LINCOLN ΤΙΝGΗΑΜ LONDON NOT 020 7494 3224 01522 513032 15 4645 01 950 wardcole.co.uk 22 of 111



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	 	stair openin	g



		Stair opening
Existing floor boards carefully cut along along the centre line of the floor joists to create the opening for the hatch		
2no. existing floor joists to be cut on the		
central line of the floor beams maintaining adequate bearing for retained joists in situ and the parts forming support for the new floor hatch		
Existing timber floor beams		
Evisting store carbola		
Existing stone corbels	Proposed floor structure plan	

Carpet to ringing chamber to be lifted to enable works to be undertaken and to be re-fitted on completion.

Timber paritions/screens on the ground floor below the working area to be given adequate protection from potential damage from the works

Existing floor beam	

Note: Do not scale from this drawing. Dimensions are to be checked on site. If in doubt please ask.



Rev A 24/02/22 Proposals amended

Rev Date/Intls Details

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	9284.	(04) 01	Α		
Drawing ref	Job No	Drawing No	Revision		
		Status			
Checked	SW	Orig Paper Size	A1		
Date	Jan. 2022	Scale	1:20		
	-				
	Proposed opening to allow for lowering of bells				
Drawing Title	Tower - Ringing chamber floor				
Location	Audlem, Cheshire				
Client	The PCC of St James				
Project Title	St Jame's Church, Audlem				

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Audlem Bell Restoration - Preferred Supplier

Three bell hanging companies provided proposals for the bell restoration at Audlem St James the Great church. The bell restoration committee's preferred supplier is **John Taylor & Co**. The other candidates were Blyth & Co Ltd and Whites of Appleton Ltd. Blyth's were eliminated at an earlier stage. The preference for Taylor's over White's is based on the following considerations:

- **Technical proposal.** White's and Taylor's reports agreed that all bell fittings must be renewed. However, their views of the frame differed considerably. Subsequently, a long investigation of the frame has included an inspection and report by an independent structural engineer, and production of a "level 3 record and analysis" by an expert on the development of bell frames. We now understand that the frame, which is contemporary with the bells, is of historical interest, and should be preserved in use if possible - though it is not a good design, and has a long history of attempts to improve its stability. While there have been some doubts about the viability of further improvements, the structural engineer is confident that it can be improved "to an acceptable level" and he has specified means for achieving this. Both Taylor's and White's have now provided new proposals that conform to the engineer's specification. We therefore regard these proposals as having similar merit.
- **Reputation.** We have consulted bell ringers in Cheshire and North Staffs with wide experience of other bell restorations. Both of the candidates are known to have done good work. White's reputation is consistently excellent: as one senior ringer put it, "No-one has anything bad to say about White's"; another said that White's workmanship is first class, and delivered on time. Taylor's reputation is not quite so consistent. However, Taylor's report on the Audlem bells has proved to be more accurate than White's, concerning both the frame and the tuning of the bells. On balance, we consider the suppliers to have similar merit.
- **Cost.** We asked the suppliers to submit updated estimates, based on the independent engineer's latest recommendation for frame improvements. They are:
 - Taylor's: £43,813
 - White's: £46,337

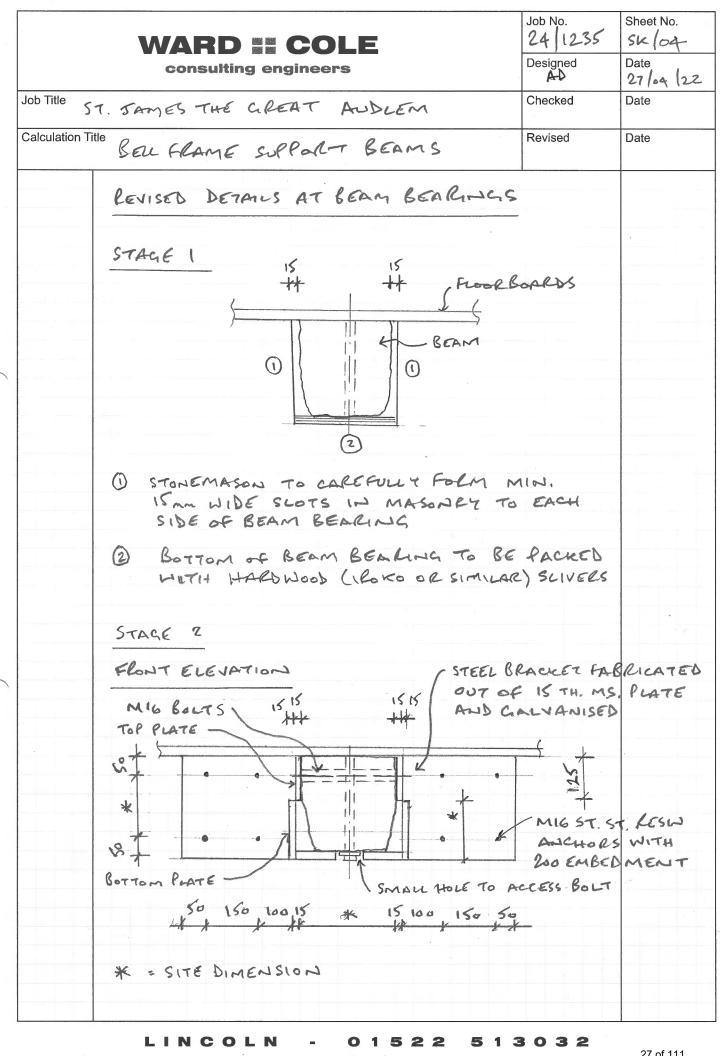
White's proposal does not include creation of a hatch to allow the bells to be lowered from the ringing chamber to the nave; nor does it include some stonework (cutting ventilation slots at the sides of the frame foundation beams in the clock chamber); these would have to be done by others. We think the total cost of using Taylor's will be around £3500 cheaper than White's.

- **Cost reductions.** Both proposals state that cost reductions may be possible, mostly based on use of free local labour and/or free transport for the bells to/from the contractor's works. Taylor's proposal includes the largest reductions for local labour, but it is by no means certain that sufficient local volunteer labour could be provided at the right time (ie, people capable of doing full time physical labour for weeks at a time). White's propose the largest reductions for transportation, but again we do not know whether local people with means to transport about 2 tons of bells will be available at the right time. These uncertainties about volunteer labour are increased by the Covid-19 pandemic. Taylor's also include possible cost reductions by refurbishing the bearings and bell wheels, rather than replacing them; we have not yet decided whether we would want to do this. We have therefore decided to ignore all these possible reductions when considering costs.
- **One stop shop.** As stated above, White's proposal excludes a hatch in the ringing chamber floor, and some stonework. We think it an advantage that Taylor's do include these items, obviating the need to employ subcontractors and coordinate their work with the main project.

In summary, Taylor's is our preferred contractor because their price is lower, and because they provide more of a 'one stop shop'. We consider the other factors above to be more or less equivalent for the two candidates.

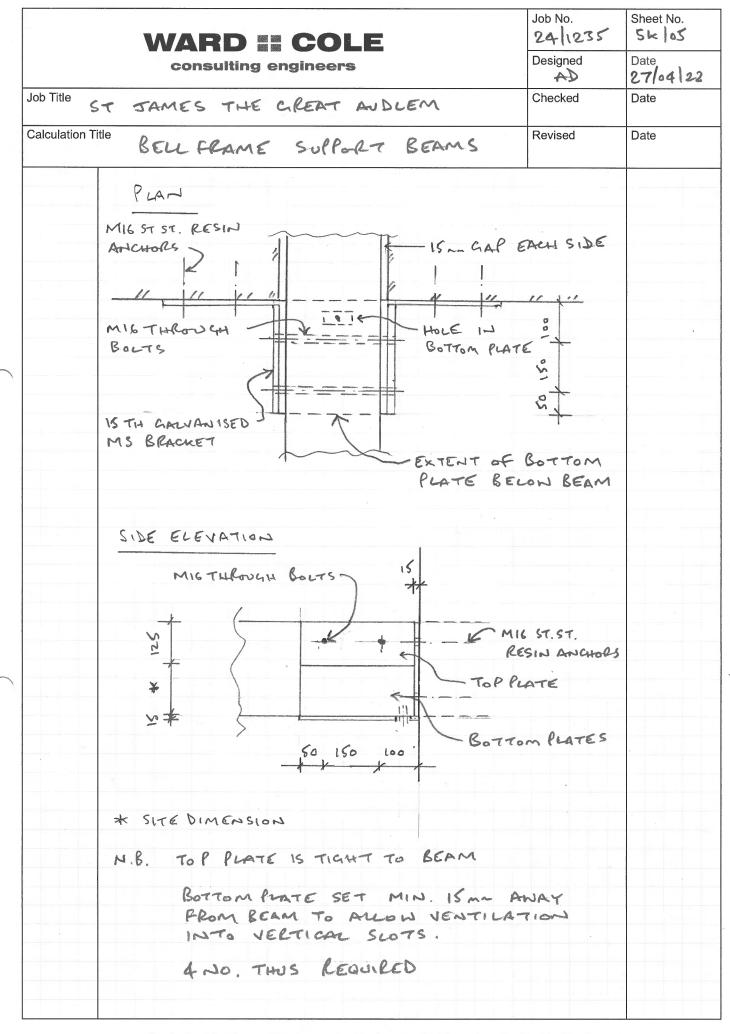
ABRA Committee, 18/6/2022 v2.0 draft 1





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AUDLEM FRAME. A NON-TECHNICAL VIEW

A. FINANCES

- 1. In terms of funding, with the exception of the architect's fee and VAT (at present reclaimable), we are ready to place a contract.
- 2. Taylors' quotation is valid until 30/05/23 at the very latest.
- 3. With inflation and energy prices on the rise, a price increase seems inevitable the longer we leave it.
- If we don't obtain a faculty now and have to change the project specification, then we will lose £11,350 in grant funding. We will also have to raise an additional £25,000 at least to replace the frame.

B. ADVICE RECEIVED

- 1. Adrian Dempster surveyed the frame and made his measurements of the frame movement with all six bells ringing. He has a lot of experience in this field and has successfully advised on the strengthening and stabilization of older frames than ours which were in much worse condition eg. Lichfield Cathedral. He is confident the work can be done successfully.
- 2. Three bell hanging companies including Taylors have expressed the view that strengthening and stabilization are both feasible and practical.
- 3. The CBC frame adviser has not seen or inspected the frame. On his advice, Adrian Dempster had to withdraw his proposals for tie rods in the wooden frame in a church in Exeter, in favour of traditional wood working solutions. The project has ben completed and is a failure.
- 4. The CBC says we will destroy the character of the old frame. In the sense that it will be stabilized, this is true, but it will be preserved.

Audlem Frame - CDH Thoughts 20/10/22

Following from John V's thoughts, here are some points that occur to me, based on the mail from John Webster.

The mail from John W makes much of the 'character' of the frame, without stating what is meant by 'character' or what the character of this particular frame is. In my view, it might to refer to two things. One is the static character: the frame's architecture and implementation. The other is the dynamic character: the behaviour of the frame when the bells are rung. John W's mail says that with the current proposal, 'the historic character of the timber bell frame would be lost'. In my view, the proposal would not change the static character of the frame in any significant way; its architecture and implementation will still be there in the tower for interested people to examine. So far as the dynamic character is concerned, I very much hope that the proposal will change it for the better - the project would be a failure otherwise. I am, of course, agreeing with the last point made in John V's note.

John W's mail says the Committee 'noted that significant doubts had been raised [by John Eisel] about the possibility of producing strengthening proposals that would enable the bellframe to perform to an acceptable standard for the foreseeable future'. In fact John E specifically says that we should consult a structural engineer about his doubts. We have, and Adrian Dempster and the engineers of three bell founders concur in saying that the improvement can be made. John W also says 'Unfortunately, the current proposals do not address these concerns'. In my view, this is wrong - Adrian's report on the frame says 'if the above recommended measures are carried out, and the bells are rehung with new ringing fittings, the movement should be reduced to an acceptable level', and Taylors have taken Adrian's measures into their proposal.

Finally, and most importantly, I would like to point out that John Webster's mail does NOT say that the current proposal will not make suitable improvements - rather, it expresses doubts about whether such improvement is possible using traditional carpentry skills, and implies that only such improvements are eligible for a grant. The only problem I have with that is that it's cost ABRA £1000 to enable them to make that decision.

My current view (before we meet!) is that we should make clear to the DAC that we (Audlem PCC and ringers) wish to continue with the current project, which will retain the current frame for the future interest of historians and Audlem residents, and will improve its performance so that it supports future ringing at St James church. We believe that both of these are attained by the current proposals. We are against replacing the frame, and incurring the very large increase in cost of doing so.

ABRA Timeline with particular reference to the bell frame

11/10/19 Inspection by Whites

20/11/19 Inspection by Blyths.

14/3/20 Report from Whites. "We are of the opinion that the frame is of good design, well made and suitable for long term reuse. However the frame rigidity could be improved and frame movement reduced by fitting vertical tie rods through the cills and braces, and angle plates in the pit corners at top cill level. ... fit additional galvanised bolts at the accessible intersections of the lower cills and foundation beams ...Fit galvanised vertical steel tie-rods in all optimum positions between the cills and braces ... Fit heavy galvanised steel angle plates in the pit corners at top cill level".

12/5/20 Report from Blyths. "Whilst we consider the existing bellframe to be suitable for reuse, we would suggest that, to ensure its longevity, two new steel foundation beams are installed below the existing bellchamber floor structure to securely attach the frame to the tower walls." No details of any other frame stiffening/strengthening given.

1/7/20 Inspection by Taylors.

16/7/20 Report from Taylors. "We noted that the [support] beams are not in a very good condition, being rather damp which could expose them to rot. ... When the 5th bell was swung in the north and south direction, the lateral deflection was measured at +/- 2mm (4mm overall). When the Tenor bell was swung in the east and west direction, the lateral deflection was measured at +/- 1mm (2mm overall) which is not ideal, as the maximum allowance for any movement in a bellframe should not be measurable with the human eye. More rigidity can be given by the fitting of tie rods, corner cleats, and cross bracing gate ends. However, tie rods can only be fitted to the inner portions of the bellframe due to the 'X' pattern framesides and worn joints in much of the bellframe and, there may not be much room for effective strengthening items. It is not clear whether the frame would withstand the additional pressure caused by the fitting of tensioning steelwork as timbers could begin to crack and, the bellframe may still move after these items are fitted. ... Due to [the above] we highly recommend that the bellframe is removed from the tower, so that a new 'lowside' pattern bellframe can be built entirely from galvanised steel, upon a new grillage of UB (universal beam) girders."

22/8/20 Meeting of John V, John K, CDH, Peter Ellis, Frank Shenton, Alan Draper considered the info on the frame in the Taylors report, and agreed to go for a new frame.

9/11/20 Asked Whites and Blyths for quotes including new frame.

23/11/20 Whites quote for new frame.

11/12/20 DAC secretary: "We have now heard back from the DAC bells advisor and DAC reviewing architect ahead of the meeting next week. These comments and

those of your church architect will be brought before the committee for further discussion, so please let us know if you wish to add your own response. We acknowledge that the architect and advisor are not in agreement at this stage [see below], the Committee will consider the merits of each view".

12/12/20 Diocesan bells advisor: "It is clear to me from [Taylors] report that the bellframe is reaching the end of its useful life. ... I feel that preserving the whole frame with strengthening will at best improve the situation for only a few decades and at worst only partially improve the situation. ... a new bellframe will deliver a bell installation that will be easy and accurate to ring, allow teaching and hopefully continued ringing at this site for many years to come".

DAC architect: "My advice remains the same, just because it is a bell frame doesn't mean that 277 year old primary fabric from a Grade I Listed building can be removed without detailed justification. It will be over to the church to prove beyond doubt that the bell frame has had its day and cannot be adapted to modern usage".

23/12/20 DAC:

"a. The Committee appreciated the virtues of replacing the bell frame, but there are strong arguments against this. The Church Buildings Council, which the DAC will be obliged to consult, has a strong presumption against the replacement of historic bell frames but may accept amendments to an existing frame. (It will therefore be easier for the DAC to recommend refurbishment than replacement.)

"b. The parish should obtain an independent view from a structural engineer regarding the feasibility of retaining and strengthening the existing bell frame. This will need to be carried out before the DAC office consults the Church Buildings Council, as the findings will need to be included with the consultation documentation".

We therefore asked Adrian Dempster, a structural engineer with wide experience of towers and bell frames, to inspect the Audlem bells and advise us, when Covid-19 restrictions permitted.

14/1/21 Blyths quote for new frame.

23/1/21 St James church architect: "I have reviewed the report from John Taylor and Co concerning the proposed work to the bell and frame at the church. I am content that they have satisfactorily assessed the work within the tower and I am happy for them to proceed in accordance with their report".

7/4/21 Adrian Dempster inspection.

20/4/21 Adrian Dempster (Ward Cole) report: "the bell frame members are adequate and in fair condition ... it is recommended that the bell frame support beams are more rigidly fixed to the tower walls, using fabricated and galvanised mild steel brackets ... In order to reduce the differential horizontal movement between the top sills of the bell frame and the tower walls, it is recommended that substantial galvanised angle brackets are installed and fixed with horizontal through bolts and plates to the vertical faces of the top sills of the bell frame at their intersections. ... Consideration should also be given to installing galvanised vertical tie bolts washer plates and nuts to connect the top and bottom sills of the bell frame where possible ... It should be noted that it is very difficult to eliminate movement entirely to timber bell frames when the bells they contain are rung full circle. However, it is considered that, if the above recommended measures are carried out, and the bells are rehung with new ringing fittings, the movement should be reduced to an acceptable level".

28/5/21 DAC: "The Committee was supportive of the revised proposals to strengthen the bell frame rather than replace it. As this is a Grade 1 listed building, the DAC office will now carry out the necessary consultation with the Church Buildings Council".

2/6/21 Revised Taylors report: "provide additional strengthening items where possible such as steel corner cleats, cross bracing within the upper beams, steel plates to fit on the sills and braces, tie bars to pass through the head sills, braces and base sills, and bearing brackets for the undersides of the timber support beams where they enter the walls. Diamond pattern cross-bracing to be formed from steel flat bar to be formed to fit within the bell pits. 'X' pattern cross bracing to be formed for the pit ends, on the outer portions of the bellframe, and where else is made possible. Corner cleats and thick steel plates to be formed to fit where possible on the head sills, base sills, and braces. Bespoke tie bars to be of the correct length, machined and galvanised".

10/6/21 Revised Whites report, including Dempster brackets.

21/6/21 Whites declared to be our preferred contractor.

25/8/21 DAC Standing Committee: "Due to the Grade 1 listing of the church the responses of the full DAC had been sought prior to the meeting (the details for the repairs having been previously circulated to the full DAC). The Sub-Committee was content with the proposals and noted the majority of the DAC had responded prior to the Standing Committee and all the respondents had voted to recommend the proposed repairs. ... subject to receiving satisfactory feedback from the Church Buildings Council (CBC), the Committee resolved to recommend the scheme".

8/12/21 CBC (David Knight, Jacinta Fisher) inspection.

17/12/21 CBC report on their inspection: "The Council notes that it is proposed to retain the frame. Given its significance and taking into account the engineering advice received by the PCC it considers that this is the appropriate course of action. It would ask that full details of the proposed works to the frame are set out clearly and submitted with the faculty petition. The Council would not be content with any proposals that saw the frame removed.

"Of the works proposed, the Council is content to defer further consideration of the matters relating to the frame, replacement bell fixtures and associated repairs to the DAC, unless its advice is specifically needed on the frame".

5/1/22 Updated estimate from Whites: "This is also amended to take into account this year's prices which have unfortunately risen steeply due to material and labour costs. ... The tuning has been omitted as requested".

6/1/22 Bells advisor: "I am happy for the work to proceed to repair/strengthen the frame and replace the fittings as outlined in the report".

21/1/22 DAC: "the DAC considered the report of the Church Buildings Council regarding their recent visit, and resolved to recommend the proposals for the bells and bellframe. ... This means that Caroline will now be able to raise the Notification of Advice, which will allow you to generate the public notice".

4/2/22 Clock links quotation from Smiths of Derby.

15/2/22 Revised quote from Taylors, with tuning removed. This is now quite a bit cheaper than Whites.

22/2/22 Intro email received from Graham Pledger: "I should like to know a little bit more about the construction of the bellframe and its foundations". Peter Ellis: "I have just had a long phone call from a Graham Pledger ... he has serious reservations that by adding tie rods we may actually weaken the frame. He said they may ask us for a detailed drawing of the frame and details of the proposed strengthening". Then I had long call from Graham Pledger.

23/2/22 Email from Graham Pledger: "starting with a drawn record of the bellframe and its foundation beams is absolutely essential because without this, there is no way of identifying the position of any strengthening proposals and agreeing them in advance. ... I shall be recommending this to John Webster next week".

27/2/22 Email from Graham Pledger to John Webster: "I am recommending a drawn record of the frame ... I have already spoken to Dr John Eisel ... I am asking for further information from Adrian Dempster, the PCC's Structural Engineer, and asking him to consider an alternative detail for the foundation beam ends. Similarly, I am asking Whites (or the appointed bellhanger) to confirm a particular tie rod detail [however, John Eisel declared this to be unnecessary]". Copied to Diocese.

7/3/22 Mail from Adrian Dempster. documenting his discussion and agreement with Graham Pledger including an outline description of revised brackets.

15-17/3/22 John Eisel in Audlem.

23/3/22 DAC secretary: feedback from meeting of 22/3/22, which seems not to have been pleased by Graham Pledger's out-of-process intervention, and encourages the parish to proceed to display of public notices.

27/3/22 Report from John Eisel, concluding: "the frame has had a long history of instability. This is partly due to inherent defects in its design, which include many vertical posts and inefficient cross braces of very low rake. ... because of the vertical posts, it is doubtful if tie-bolting the frame would have any real effect on its performance. Also the fact that the joints in the frame-heads have already been stiffened with inset plates, albeit in in a horizontal plane, also suggests that adding angle brackets will also have little effect. It is understood that there is vertical movement in the whole frame which must be addressed, but removing that by supporting the primary timbers will do nothing towards reducing the lateral movement. Moreover, there is severe damage to truss 5 [due to installation of the clock hammers] which would need to be addressed.

"A decision should be made after consulting a structural engineer. If that professional can produce a viable scheme for strengthening the frame so that the inherent design defects can be overcome, and so it can perform to an acceptable standard for the foreseeable future, that would be the best way forward.

"However, in my view this is unlikely to be achieved, and in that case a new frame at the current level is the only way forward".

31/3/22 Mail from Adrian Dempster, responding to the the conclusions of John Eisel, above: "At the end of the day, your chosen bell hanger will take responsibility for the strengthening of the bell frame. They will consider the recommendations made in my report and specify the remedial works which they think are necessary. I think that John Eisel is being rather pessimistic ... I feel that, packing loose joints where necessary, repairing the members which have been cut out for clock hammers and using tie rods and substantial brackets with through bolts, the frame movement could be reduced to acceptable limits ... Reading the bell hangers' reports, all of them say that the frame is capable of being strengthened, an opinion with which I agree".

27/4/22 Updated Adrian Dempster bracket diagrams, after his discussions with Graham Pledger.

18/5/22 Updated estimate from Whites, taking into account revised Dempster brackets, and "Unfortunately we have also had to increase the prices of our fittings due to steep metal cost increases, notably on the headstocks".

30/5/22 Updated estimate from Taylors, taking into account revised Dempster brackets.

18/6/22 Preferred Supplier: switch from Whites to Taylors, based on price and one-stop-shop.

21/7/22 PCC approve Taylors as contractor.

11/8/22 John Webster (CBC Grants Admin): "The Committee supports the proposals for the work to the bells. However, concerns over the effectiveness and longevity of the proposed works to the bell frame, mean that we are unable to grant aid the project at this stage. ... a site visit, involving all the relevant parties may help to resolve this issue".

12/8/22 Simon Adams (Taylors): "Maybe we need to attend site with Adrian Dempster to sort this out once and for all?".

13/10/22 John Webster email: "When the Council gave its advice in December 2021, it welcomed the retention of the timber frame and stated that full details of the proposals should accompany the faculty petition. This advice was given on the basis of the Ward Cole report which recommended repairs which it was understood would not overly impact on the character of the timber frame in the tower. Details of the repair were not available to the Council at that time. As the proposals have been developed by your chosen bell hanger the amount of metal work specified to secure the frame has increased, to the extent that the historic character of the timber bell

frame would be lost. Keeping its character is an important outcome of the advice that it was retained in use in the tower. If a repair that perpetuates the historic character of the bell frame is unrealistic, then the reason for its retention is undermined. Therefore, if a repair using traditional carpentry skills is not possible the Council would not continue to advise in favour of the restoration of the frame. "When the Bells Committee of the Church Buildings Council met in April 2022, it noted that significant doubts had been raised about the possibility of producing strengthening proposals that would enable the bellframe to perform to an acceptable standard for the foreseeable future. Unfortunately, the current proposals do not address these concerns.

"The Council is unable to grant aid this project while it has doubts over the proposals for the bell frame. Given the significance of the bells it hopes that a way forward can be found either by replacing the current frame or with traditional repairs of the current frame".

14/10/22 Peter Ellis to DAC secretary: "Does the attached letter [from John Webster], just received, change the views of the DAC?". DAC Secretary: "Yes, I think it probably does ... we can take it to the November meeting".

JOHN TAYLOR & CO.,



BELLFOUNDERS, BELLHANGERS AND CARILLON BUILDERS

Our ref: SEA/PT/sea/601/3

Mr John Kemble Plum Tree Cottage Kettle Lane Audlem CW3 0DR

> 30th December 2022 Last issued 8th July 2022

Dear Mr Kemble,

<u>CHURCH OF ST JAMES THE GREAT, AUDLEM</u> (Revised 8.7.2022) SPECIFICATION & QUOTATION 1.0

<u>TO REFURBISHING & REHANGINGTHE BELLS ON MAINLY NEW FITTINGS</u> <u>IN THE EXISTING BELLFRAME</u>

Pre-commencement

Our Company representative to travel to the church to discuss the scope of works with church officials and take careful measurements to confirm / alter our proposals.

Dismantling

Bellhangers to travel to the church with the necessary tackle and tools.

Provide OSB board panels to protect the floor at the base of the tower and the boiler house slab outside the tower. The clock case to be protected with dust sheets before lowering and hoisting commences. Cover the woodwork of the toilets with dust sheets and OSB boards.

The clock face dial rod to be marked up, disconnected from both ends, and safely stowed away before hoisting and enabling work commences.

The man hatch of the clock chamber floor to be opened up and cement boards removed to reveal the bell hatch in the ringing room ceiling. The old balustrading / altar rails to be temporarily removed from the perimeter of this hatchway and set aside. The existing companion way timber ladder to be removed from the bellhatch and set aside; a temporary aluminum ladder to be placed in the hatchway to maintain man access.

John Taylor Bell Foundry (Loughborough) Limited trading as JOHN TAYLOR & CO.

The John Taylor Bell Foundry, Freehold Street, Loughborough, Leicestershire, LE111AR, UK Telephone: 01509 212241 Fax: 01509 263305 Tel: International +44 1509 212241 Fax: International + 44 1509 263305 Email: office@taylorbells.co.uk www.taylorbells.co.uk Registered in England No. 7032766 A trapdoor capable of passing the largest bell to be cut, trimmed and opened in the ringing chamber floor according to Dwg. (04) 01 Rev.A by us or by others (See Appended Item No.1.8).

Hoist and rig the tackle in the bell chamber from the lifting beams above the bellframe. Acro-props to be inserted between the bellframe headcills and the roof / lifting beams as required.

Dismantle the bell fittings and set them aside. The clock hammers to be tied off to keep them clear of the bells. The Treble and 2nd bells to be hoisted from their pits and placed on temporary timbers spanning the bellframe.

The "shifter" frameside between the Treble and 2nd bells to be carefully removed, dismantled and set aside to reveal the floorboards below the centre pits of the bellframe. The clock hammer quadrants and their mounting boards attached to the undersides of the belfry floor to be marked up, photographed, and removed (See Appended Item No.1.7).

The floorboards of the centre pits of the bellframe to be removed sufficiently to allow the bells to pass through clear. The bells to be systematically hoisted from their pits, and carefully lowered to the ground via multiple and offset chain blocks. The bell fittings to be lowered to the ground.

The bells to be stored at the base of the tower until dismantling is complete.

The bells and their fittings to be loaded onto our vehicle provided and transported to our works in Loughborough.

Trapdoors throughout the tower to be closed.

Design engineers to travel to the church and accurately measure the vacated bellframe for the manufacture of the new bell fittings and frame strengthening items.

At the works

Careful measurements to be taken of the bells to allow for the manufacture of the new bell fittings.

The bells to be gently sandblast cleaned to remove scale and verdigris and checked for cracks.

The outsides of the bells to be given a brushed-on layer of protective graphite blacking to enhance and conserve their appearance

A resin pad to be cast around the remaining canon stumps, and machined flat and level so that the new headstocks can sit square and true. The inner heads of the bells to be lightly machine skimmed, so that the new crownstaples can sit square and level in their respective bells.

Any roots left by the cast-in crownstaples in the bells heads to be removed. Any voids left by the staple roots to be back filled with Devcon durable repair putty.

The bells to be turned to present the unworn surfaces of their soundbows to the blows of the clappers.

The bells to be fitted to their new bell fittings and a final polish to be given to each bell before dispatch.

<u>Bell Fittings</u>

When modern bell fittings were first introduced by our predecessors at Loughborough in the late 19th century, the hollow box section cast iron headstock brought about a considerable improvement in the ease with which bells could be rung compared with timber headstocks that preceded them.

The headstocks were very carefully and cleverly designed to give a very good weight relationship to the bells that hung from them and this, combined with a deceptively simple hanging geometry formula, has provided the philosophy behind the mainstay of bell hanging by this company since 1892.

There are numerous examples of peals which have been rehung by John Taylor & Co, which provide a familiar and comfortable at ease feeling to the handling of the bells when they are being rung.

Provide for each of the bells a set of new and refurbished ringing fittings comprising of:

- A cast iron headstock of hollow box-section pattern which is carefully machined to be balanced with the head of each bell and fitted with turned steel gudgeons with hot rivet fastening. Each headstock to be equipped with clapper adjustment screws.
- Rot resistant cast resin pads to be fitted between the heads of the bells and the undersides of their headstocks.
- An independent cast iron crownstaple with a mild steel joint pin to which is fitted with a new spheroidal graphite cast iron clapper which is machine profiled for accurate swing times. Each clapper to be fitted with a resiliently mounted *oilite* bush, accurately bored to suit new mild steel joint pins, cross drilled and fitted with angular hydraulic lubricators to facilitate periodical lubrication.
- Turned hardwood rope roller (pulley) with steel spindles working on enclosed bearings in a timber box with the necessary securing ironwork, to assist the bell rope as it passes down to the ringer.
- A stay and slider of ash with a timber centre block and pivot pin, and a robust timber runner bar with adjustable hardwood stop blocks.
- The necessary cast iron turned floor bosses to protect the bell rope where it passes through the ceiling and floors. For the belfry floor, the rope bosses to be made of weather resistant smooth turned nylon.
- A new bellrope formed with pre-stretched high-quality polyester top rope, flax yarn rope bottom ends and soft sally formed from pure wool in the colours of the Church's choice (red, red, blue).

Retain and refurbish:

- The bell wheels to be stripped from their old soling, shrouding, and bobbins. The centres to be sanded down and adjusted to suit the new headstocks, fitted with new, well carpentered hardwood steam bent soling and sapele shrouding. New hardwood bobbins at the garter hole to protect the bell rope. The soling and shrouding of the wheel rims to be fixed in place using best quality stainless steel screws throughout. The bell wheels to be thoroughly treated with a highquality wood preservative solution.
- The bearings to be stripped down, cleaned, inspected, and refitted into their current timber-type housings with new seals and fresh lubricant.

Each bell to be fully assembled in the works with its headstock, bearings, clapper, crownstaple and wheel and dynamically tested on our ringing-up frame to ensure accuracy of alignment and striking.



Above: An image showing a bell being swung and analysed in our testing stand.

All cast items to be finished with two coats of traditional Taylor red paint. Steel items to be hot-dip galvanised. Wooden components to be treated with high quality wood preservative.

Bellframe Strengthening Items

Provide additional strengthening items where possible such as rolled steel corner cleats through bolted for the frame heads, short section rolled steel connecting plates to fit at the junctions where the base sills and foundation beams meet, full and short length tie bars to pass through the head sills, braces and base sills, and bearing brackets for the undersides of the timber support foundation beams where they enter the walls.

Corner cleats and thick steel backing plates to be formed to fit where possible on the head sills, base sills, and braces.

Bespoke tie bars to be of the correct length, machined and galvanised. Fabricate bearing brackets for where each support beam enters the walls. The brackets to be of a single-part construction to be bolted on to each support beam on both sides and made with fixing holes to be bolted to the walls using chemical anchor resin and stainless-steel studs. The bearing brackets to be formed to the proposals from Adrian Dempster of Ward Cole Ltd (See from his report on sheet SK-04/5 in his document dated 27/4/22).

All items to be prepared for delivery to site and with all the necessary fixings.

Installation

Deliver the bells, fittings, frame strengthening items to the church.

The bells to be positioned in the church on display.

Bellhangers to travel to the church with the necessary tackle, tools, and Zip-up scaffold. Rig the tackle from the lifting beams.

Corner cleats, steel plates, and other steelwork to be fixed into place using fixings which are protected against corrosion. The current steel plates to be cleaned down and repainted to inhibit further corrosion.

The frame heads and base cills to be drilled as required with harpoon drill bits and new tie bars to be fitted.

Drill into good stone around the timber support beams in intermediate chamber, to allow for the fixing of the bearing plates.

Our stonemason to carefully open up the stonework pockets at the sides of the 4no. main foundation beams to a minimum of 15mm for air circulation.

Fix the plates into position using stainless steel stud and chemically anchored resin. Drill through the timber support beams and fit the fixing bolts, to tie the beams to the bearing brackets.

Hoist the bells and their fittings into the bell chamber and hang the bells on their fittings in their respective pits. The "shifter" frameside to be reinstated. If bells are to be fitted into the same position, lower them into the already trimmed head sills, and square up their bearing housings; if they are to be moved to improve the rope circle, carefully trim the heads sills ensuring they are square and level. The roping positions of the Treble, 5th and Tenor bells to be improved as requested.

The clock hammers to be adjusted and set at the optimum positions relative to the soundbows of the bells by us or by others (See Appended Item No.1.9.1).

Carefully and correctly adjust the fittings of each bell, including the clappers, which are to be centred and evenly struck.

Mark down from the wheels and cut rope holes in the floor and ceiling. Erect the zip-up scaffolding and fit the new cast iron ceiling bosses and the bell ropes. The ringing room ceiling bellhatch to be made good and a new cement boarding panel to be fitted and painted. The removed ladder to be reinstated and the clock dial bar to be refitted and the hands set to the correct time. The clock quadrants to be refitted and connected up.



All debris and temporary lifting beams to be carted away for disposal. Any areas of paint work damaged during the work to be touched up as a standard procedure.

The belfry and church to be left in a clean and tidy condition.

The bells to be tried out by a competent band of ringers under our supervision before our bellhangers leave site to ensure that all is well with the installation.

As part of our contract, our service engineer to carry-out a one-off servicing of the bells within twelve months of completion of the work listed above. This is to include ensuring that all accessible nuts and bolts are tight, clappers are checked for "odd-struckness" and that rope rollers freely rotate.

QUOTATION No.1.0

We undertake to do the work in the specification above for the sum of **£39,885.00 plus VAT.** This price is fully inclusive of all parts, labour, accommodation, building work, and transportation. This quotation can be considered fixed for orders placed by May 2023.

Cost reducing items

Appended item 1.1 – Local labour helpers

If local labour help in the form of two or more able bodied assistants could be provided free of charge to us, to work with one bellhanger for the full duration of time that he is on site, Quotation 1.0 could be **reduced by the sum of £8,004.00**. We would require local labour to be physically able to undertake manual work, and to be present on site at all times with our employees for health and safety requirements.

Any local labour volunteers working in conjunction with our bellhangers are fully covered on our public and employer liability insurance, free of charge to the restoration project.

Appended item 1.2 – Locally provided transport.

If locally provided transport were made available free of charge to us to move the bells from the Church to our works and back, our quotation above could be **reduced by the sum of £444.00.**

Appended item 1.3 – Local dismantling of clappers, wheels, ropes and stays

If the bellropes, stays, roller boxes, wheels, and clappers could be removed ahead of our arrival, we could allow a **reduction of £432.00** from our main quotation.

Appended item 1.4 – New bellropes

If it were decided to reuse the current bellropes, or if new bellropes were to be provided free of charge to us, our main quotation above would be reduced by **£1,170.00**.

Appended item 1.5 – To non-sandblast cleaning of the bells

If it were decided to not sandblast clean and polish the bells, our main quotation above would be **reduced by £1,536.00**

Additional cost items

Appended item 1.6 – To providing all new bell wheels

If it was decided to have entirely new bell wheels rather than resole and reshroud the existing centres and spokes, the additional cost would be **£2,040.00 plus VAT**. This item could become part priced if not all new wheels were required.

Appended item 1.7 – To additional cost of preparing bellframe shifter beam and removing / refit clock hammer quadrants

If one of the bellframe trusses was used to become the "shifter" so that the bells could be removed from the belfry without the need cut extra trapdoors, and the clock hammer quadrants were removed to enable this work, there would be an additional charge of **£442.00 plus VAT** to cover extra time needed on site to prepare the bellframe and quadrants for this work.

Appended item 1.8 – To cutting the ringing chamber floor trapdoor

If only the lowest trap in the ringing chamber required to be cut and trimmed (as per specified drawing from Buttress Architects) the cost of this as a stand-alone item would be **£496.00 plus VAT.**

Appended item 1.9 – To replacing the main bearings of the bells

If it was decided to replace all of the main bearings rather than reuse the existing ones, the additional cost would be £1,020.00 plus VAT.

Appended item 1.9.1 – To reinstatement and adjustment of the clock hammer heights

If after rehanging the bells we were commissioned, to reset the positions, heights and wiring connections to the clock hammers the additional cost of this work would be **£1,280.00 plus VAT.**

Financial Summaries for the Audlem Bell Restoration Project.

Please find below the options summarised financially:

To fully refurbishing and rehanging the bells on mostly new fittings, to hang in the current bellframe which has been strengthened, including all labour reductions.

Item	Cost
Main Quotation	£39,885.00
Add new bell wheels	£2,040.00
Add preparation of shifter frameside	£442.00
Add Lowest trapdoor in ringing room	£496.00
Add replacement main bearings	£1,020.00
Add adjustment to clock hammers	£1,280.00
Sub total	£45,163.00
Overall locally provided labour reduction	-£8,004.00
Locally provided transport reduction	-£444.00
Local labour dismantling	-£432.00
Possible Sub-total	£36,283.00
VAT 20%	£7,256.60
Total with all additions and reductions	£43,539.60

Exclusions

No items are considered to be excluded for the satisfactory refurbishment of the bell installation.

Our All-Inclusive Service

Most bell hanging contractors may exclude the majority of building works from their contract, which involves cutting pockets into the stonework and encasing the bellframe foundation beam girders with concrete. This leaves the parish to arrange this aspect of the work to be done by others, whilst our company offer this aspect of a bell restoration contract as standard. The cost of carrying out this building work is included within our main quotation above.

Further work that other bell hanging contractors may exclude from their contracts, is the installation of lifting beams and, the opening and forming of bell traps. This also leaves the parish to arrange this aspect of the work to be done by others, whilst our bellhangers will carry out this work within their first visit to the tower. The cost of carrying out all of this work is also included within our main quotation above.

We have considered and included every single item of work which is necessary to allow for a full ringing peal of bells in this tower, from fitting trap doors, to fitting new floors and replacement access ladders where necessary. Other contractors may not have considered these items and it is imperative that all off the necessary building work is carried out in a predetermined manner, as to not create any unwanted contingencies which arise during the work of the bell restoration project. We provide the most detailed service and have the abilities to carry out all of this work ourselves, making a bell restoration project of this magnitude a much simpler process to manage in comparison with the service given by other contractors.

Price reductions for local contractors to carry out the building works listed above can be provided individually on request. However, if differing building contractors have not installed the items exactly to our specification, we cannot take responsibility for any discrepancies or further costs caused by this.

Faculty

A faculty is required before works can start.

Insurance

We are insured for £10M in respect of Employer's Liability, and for £10M Public and products liability. Bells held in our works and transported by our haulier are covered by our insurance for their full replacement value. Volunteer labour helpers are covered by our insurance free of charge when we are at site.

CDM Regulations

The collective number of days and hours worked in continuity classify the project as non-notifiable to the HSE. We work in compliance with current health and safety and CDM regulations, and prepare RAMS, construction phase and lifting plans. We manage our own projects in collaboration with our clients, therefore exclude the need to appoint external project management.

<u>VAT.</u>

Under the present rules regarding tax on bell work, all the work outlined in of our quotation would be subject to VAT at the Standard Rate, currently 20%, however, the PCC can reclaim all the VAT paid, in the form of a grant from the Listed Places of Worship. See Ipwscheme.org.uk.

<u>Terms</u>

Our terms and conditions are enclosed. We are happy to consider variations to our terms of payment, and to our proposals. We will gladly discuss payment plans to allow for a speedier project commencement, and we are happy to discuss this at any time. Our quotations can be considered fixed price if the works are ordered by May 2023.

We understand that some grant funding payments are made after full practical completion, and that the last invoice may need to be paid off in stages. We are happy to negotiate beyond our standard 30%, 30% 40% terms.

Project lead times

We could start the works on site to remove the bells around 4-5 months after the order has been placed (dependent on workload at the time of order) and the bells would be out of the tower for approximately 4-5 months. The works to remove the bells and cut the lower trapdoor will take 5 days. The strengthening of the bellframe and rehanging the bells would take approximately 20-25 days but possibly not in succession.

Guarantees

Our work carries a guarantee against failure. Our headstocks are guaranteed for **30** years, and all other items will be guaranteed as stated in our terms and conditions.

Funding

We recommend that the following grant giving bodies are approached:

National Heritage Lottery Fund (now accepting applications) Garfield Weston Foundation Sainsbury's Charitable Foundation **Co-operative Community Fund** Tesco Bags of Help (groundwork.org.uk) Wind farms community trusts Landfill Operators (VIRIDOR CREDITS, SITA TRUST, Entrust Ltd) WREN via National Historic Churches Trust Quarry Operators (TARMAC, LAFAGRE, etc) Waitrose Community Fund The Arts Council The D'Oyly Carte Opera Company Andrew Lloyd Webber Foundation The Compton Fund for Arts, Culture, and Heritage Put donors' names on headstocks (£5.50 per character, plus VAT) Approach local business who may be able to assist with transport or materials

For the Garfield Weston Foundation & HLF, if you can put an 'Educational' and 'Historical' spin on the application, encompassing the wider community as far as possible, that will help. Funders that may require a faculty and an amount of money already to be in place are:

Barron Bell Trust Sharpe Trust Chester Diocesan Guild of Church Bell Ringers bell restoration fund. CCCBR Bell Restoration Fund The Hobson Charity (London) All Churches / Benefact Trust

We trust that we have covered all of your preferences in this document, and we look forward to hearing further from you when the bellringers and PCC have considered our proposals above. In the meantime, please do not hesitate to contact us if there are any further questions that you would like to ask, regarding the bell installation or our proposals.

Yours sincerely,

Simon Adams JOHN TAYLOR & Co. Encl. Terms



Photo: Bangor on Dee Rudhall bells cleaned and fitted with new cast iron headstocks and existing bearing housings.

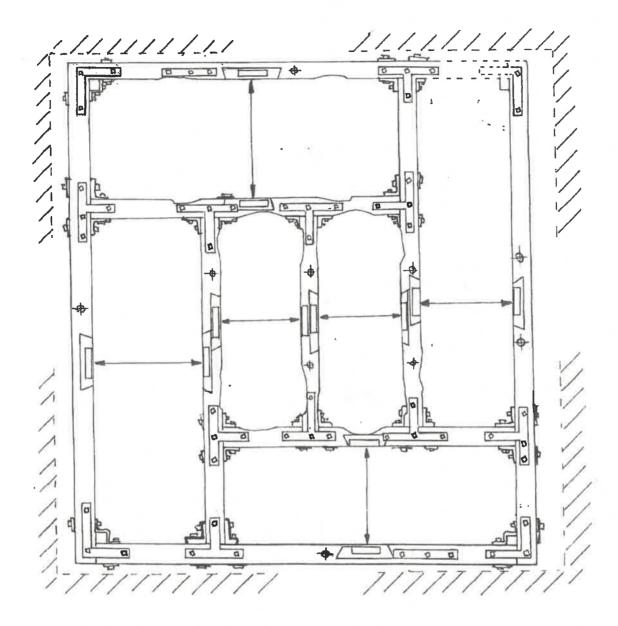


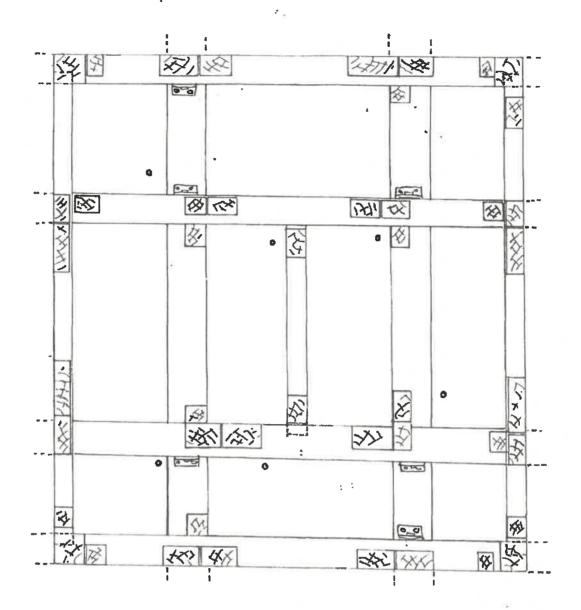
Figure 3. Plan of frame at frame-head level, north to the top, showing the relative position to the tower walls, drawn to a scale of 1:20, reduced to 70%. Positions of belfry windows are covered and hence not measured.

28.11.12

23no. CORNER CLEATS WITH THROUGH BOLTS AND BACKING PLATES FITTED TO FRAME HEADS.

17.2.23 10NO. TIE BARS ADDED SHOWN AS \$





Plan of frame at sill level, showing roping positions of the six bells at the Figure 4. level of the pulleys, drawn to a scale of 1:20 and reduced to 70%.

28.11.22 6 NO. RSA BASE CLEATS TO FOUNDATION BEAM CONNECTIONS



2

Figure 6. Truss 2, east elevation of the west truss of the pit for the fifth bell.

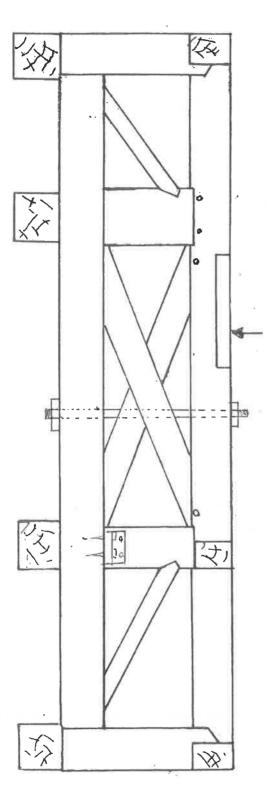


Figure 5. Truss 1, south elevation of the north truss for the pit for the tenor bell. Drawn to a scale of 1:20

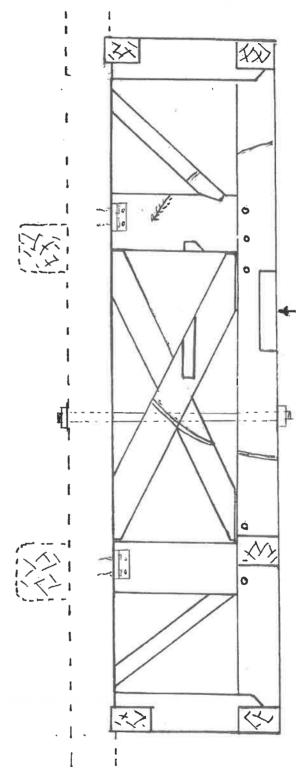


Figure 8. Truss 4, west elevation of the east truss of the pit for the fourth bell.

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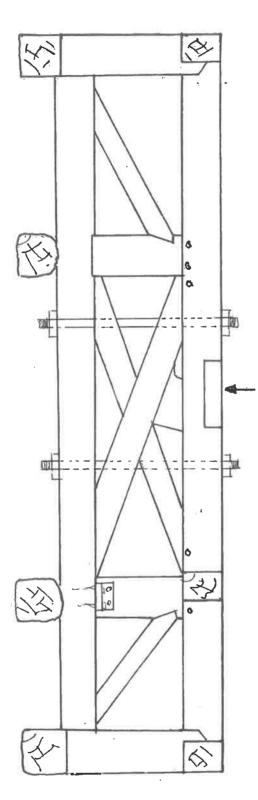
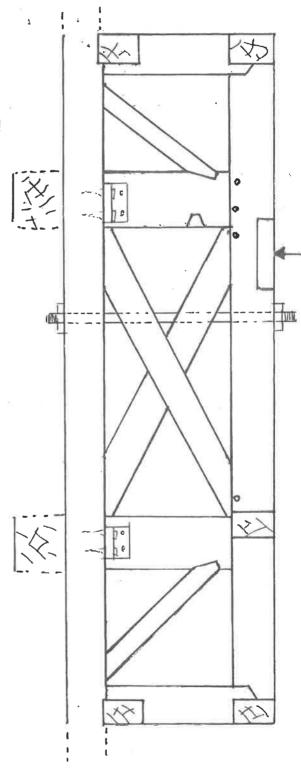
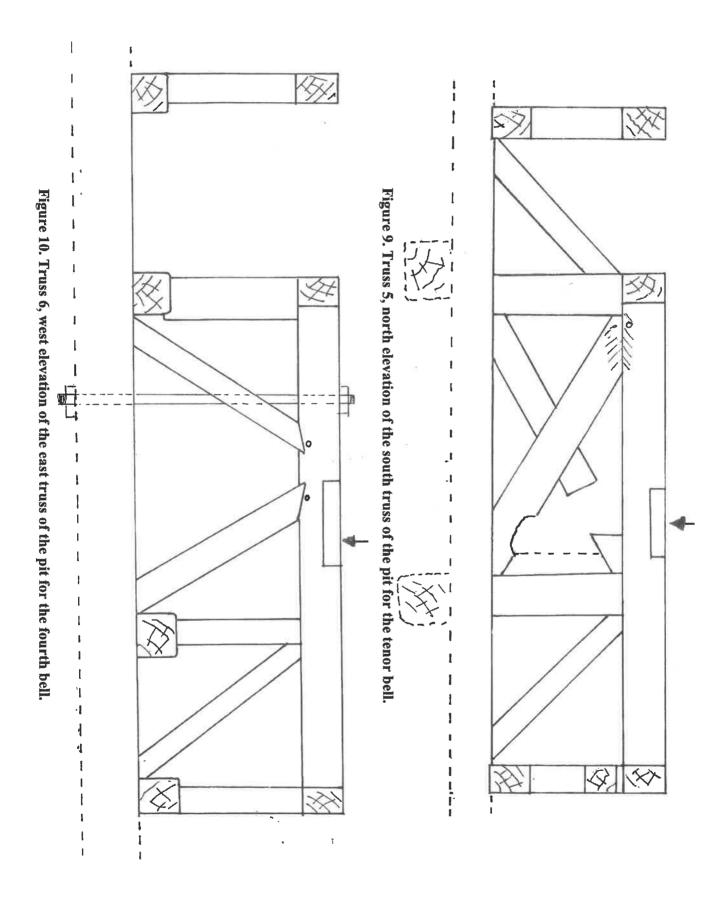
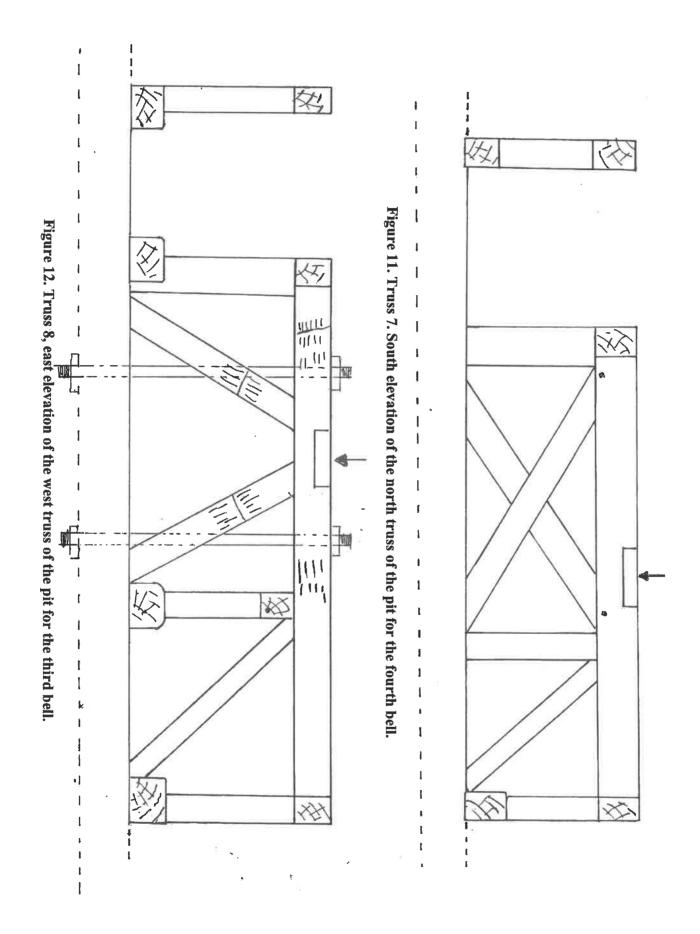


Figure 7. Truss 3, north elevation of the south truss of the pit for the fourth bell.





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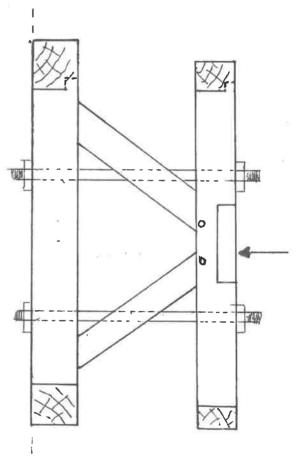


Figure 13. Truss 9, east elevation of the west truss of the pit for the second bell.

JOHN TAYLOR & CO.,



BELLFOUNDERS, BELLHANGERS AND CARILLON BUILDERS

Our ref: SEA/sea/601/3

Mr John Kemble Plum Tree Cottage Kettle Lane Audlem CW3 0DR

21st February 2023

Dear Mr Kemble,

CHURCH OF ST JAMES THE GREAT, AUDLEM – The Bells project

As arranged, we attended a site meeting at the church on Wednesday 21st December 2022 with representatives of the PCC, bellringers, Church Buildings Council and Mr Adrian Dempster of Ward Cole Ltd.

The purpose of the site meeting was to confirm and ascertain how the bellframe and its foundation beams stand under the dynamic loading of the bells being rung in full circles.

Background

The project to rehang and restore the bells has recently evolved, and options were provided to either strengthen the bellframe and consolidate the foundation beams, or entirely replace the whole structure.

The consolidation of the foundation beams as detailed and proposed by Ward Cole Ltd has undergone an amount of alteration and variation to specification as has the bellframe strengthening proposal.

In considering and formulating a repair and strengthening plan for a bellframe, it is important to quantify the current condition and present movement. The outcome of the measurement and visual checking determines if a bellframe can be strengthened and kept in working order for more than just a few decades.

It should be kept in mind that the bells were rehung by our Company on their current timber headstocks in 1891 possibly without being removed from the tower, and in 1996-7 the headstocks were removed from the bells by local labour and sent to our

John Taylor Bell Foundry (Loughborough) Limited trading as JOHN TAYLOR & CO.

The John Taylor Bell Foundry, Freehold Street, Loughborough, Leicestershire, LE11 1AR, UK Telephone: 01509 212241 Fax: 01509 263305 Tel: International +44 1509 212241 Fax: International + 44 1509 263305 Email: office@taylorbells.co.uk www.taylorbells.co.uk Registered in England No. 7032766 Works for refurbishment and the fitting of new gudgeons and ball bearings – the fittings then being reinstated by local labour.

Although the bell installation has been maintained and the fittings attended to as and when required, the majority of the components are of obsolete design and now require renewal, and the local team of bellringers have noticed that the bells are becoming more difficult to handle. Some of the difficulties are certain to be exacerbated by movement in the bellframe foundations and its structure.

There has been very little by the way of any frame strengthening work undertaken for many decades other than the installation of some diagonally placed thin sectional flat bracing bars fitted to the back faces of the outer frame trusses with small bolts; the sections of steel and bolts being of such small size, they are not likely to form any kind of strengthening or stabilization.

During our visit we noted that when all of the bells were rung there was found to be 1-3mm of horizontal movement overall (+/-0.50 to +/-1.50mm) of the bellframe at head cill level. Once bellframe movement exceeds 4-5mm overall, the bells would become very difficult to handle with ease by competent and experienced bellringers, and that is not the case experienced at Audlem.

When measured east to west (in the direction of the 4th and Tenor bells) the movement of the bellframe headcills was 1.0mm. When measured north to south (in the direction of the Treble, 2nd, 3rd and 5th bells) the movement of the bellframe headcills was 3.0mm, which given that this direction has the greatest mass of bell weight, and the longest trusses is not surprising.

Bellframe Strengthening proposal.

Our proposal to strengthen the bellframe and reduce its movement follows the wellused and proven method of fitting and through bolting short lengths of rolled steel corner cleats to the junctions of the bellframe head cills, and base cills to upright posts and the insertion of vertical tie bars from the bellframe head cills through to the base cills, and into the foundation beams where they intersect below the bellframe.

The plan drawing attached shown as figure 3 dated 28.11.22 and 17.2.23 taken from Dr John Eisel's sketches shows 23no. corner cleats fitted to the bellframe head cill junctions. It is our intention that the existing top mounted 'T' bars will remain intact, and that their fixings will be checked and tightened.

Where possible, the headcill corner cleats will be through bolted to backing plates with nuts fitted (or to adjacent corner cleats). Where space does not allow for a fully bolted connection, timber coach screw fixings would be provided.

In certain bell pits – (3rd, 4th, 5th and Tenor) special cleats will be formed to fit around existing posts and timbers.

The plan drawing shown as figure 4 dated 28.11.22 taken from Dr John Eisel's sketches shows 6no. base cleats fitted to connect the bellframe vertical post to base cill junctions. These cleats will enhance bellframe lateral stiffness in conjunction with the corner cleats. These cleats are also marked up on figures 5-8.

The plan drawing shown as figure 3 is also marked up with 10no. vertical tie bars fitted through bellframe trusses marked as 1-4 and 7-10. These tie bars to be formed from M20 or M24 round bar threaded at each end and provided with top and bottom plates and nuts.

The tie bars to be fitted through the top cills (and bracing legs where applicable) and through to the base cills, and into the foundation beams where they intersect below the base cills. The purpose of the tie bars is to keep the bellframe under vertical compression and its mortices and bracing joints tight (see marked up figures attached 5-13). Where no tie bars are shown, it is not possible or intended to fit them at that point.

The exact placement of the tie bars to be determined by the bellhanger on site.

If upon test ringing the bells after rehanging and the fitting of the corner cleats it is found that bellframe movement has been reduced considerably, then less or no tie bars would be fitted.

It is expected that there could be a reduction of 40% in the bellframe horizontal movement of the bellframe after the above works are carried out, and we take responsibility for achieving these results.

Foundation beams

The foundation beams are known to move laterally and vertically within their wall pockets. and bearing brackets for the undersides of the timber support foundation beams where they enter the walls.

The foundation beam ends at their wall holds to be supported by brackets formed of a single-part construction to be bolted on to each support beam on both sides and made with fixing holes to be bolted to the walls using chemical anchor resin and stainless-steel studs. The bearing brackets to be formed to the proposals from Adrian Dempster of Ward Cole Ltd (See report on sheet SK-04/5 in his document dated 27/4/22). The responsibility for the performance of these brackets rests with Ward Cole Ltd.

Recent works to bellframes

We have strengthened and restored timber bellframes with the above-mentioned methods at: Netherbury, Dorset; Church Stowe, Northants; Norton Bavant; Hampstead Norreys, Berkshire (dated 1680); Horley, near Banbury; Cruwys Morchard; Bole, Nottinghamshire. We trust that we have covered all of the points raised in connection with the planned works. In the meantime, please do not hesitate to contact us if there are any further questions that you would like to ask, regarding the bell installation or our proposals.

Yours sincerely,

Hurs

Simon Adams JOHN TAYLOR & Co.,

Encl. Marked up drawings.

Audlem St James – Bells - Correspondence with parish and others

Attachments are listed according to the numbering on the supporting documents list

- Attachments in brown are included within the overview section
- Attachments in blue are included within the proposals section
- Attachments in purple are included within the PCC section
- Attachments in black italics are superseded and not included within the application

Date	Message
21/08/2020	As a result of concerns for the Bell Hanging at St James Church Audlem
	our Bell Ringing Team commissioned a report on the condition of the
To: Caroline Hilton	Bells. Reports were received from three Companies John Taylor, Blyth.
From: Peter Ellis	and Whites of Appleton. Each Company recommended similar actions
	for complete refurbishment.
With attachment	Due to the complexity of the reports and the fact that substantial work
	has recently been completed on the Tower we felt it appropriate to
	consult both the Diocese and our Architect before proceeding with a
	faculty application. The Wardens and Bell ringers are of the opinion that
	a full refurbishment should be undertaken.
	I am therefore attaching a copy of the Taylor report with the request for
	advice on the next steps to be taken.
	Report and Quotation of John Taylor & Co dated 16 July 2020
02/09/2020	Thank you for your message with report, and my apologies for the delay
	in responding. I will end this to the diocesan Bells Adviser for review and
To: Peter Ellis	will also add this to the agenda for the forthcoming DAC meeting taking
From: Caroline	place on 18 September. We will get back to you as soon as we can with
Hilton	feedback.
	One thing I note is that you mention you received three reports, of
	which you have supplied the one by John Taylor & Co. Would it be
	possible for you to also send me the reports from Blyth and Whites of
02/09/2020	Appleton? It would be helpful for comparison.
02/09/2020	Please find reports attached.
To: Caroline Hilton	Report of Blythe and Co dated 11 May 2020
From: Peter Ellis	Superseded Whites of Appleton report conclusions
With	
attachments	
02/09/2020	Many thanks for sending those over
To: Peter Ellis	
From: Caroline	
Hilton	
25/09/2020	DAC Advice
Tax Datas 511-	I am writing to let you know that at its meeting of 18 September 2020
To: Peter Ellis	the DAC considered the details you provided relating to the above
	proposals and wished to offer the following informal advice:

From: Caroline	a) It asked the parish to obtain the written comments of the
Hilton	Church Architect regarding the proposals
	b) The church architect's feedback will then be referred (by the
	DAC office) to the Bells Adviser for further comment
	During the discussion, it was the Committee's consideration of the
	structural/architectural elements of the proposals regarding the bell
	frame and access to remove the bells for their restoration that lead to
	the above informal advice. (The proposed works to the bells themselves
	were positively reviewed.)
08/12/2020	I have reviewed the report from John Taylor and Co concerning the
	proposed work to the bell and frame at the church. I am content that
To: Peter Ellis	they have satisfactorily assessed the work within the tower and I am
From: Nick Rank of	happy for them to proceed in accordance with their report.
Buttress	
08/12/2020	Response from Nicholas Rank Architect as received
To: Caroline Hilton	Email of Nick Rank as above
From: Peter Ellis	
09/12/2020	Thank you for your message with the architect comment regarding the
	proposed work to the bells and frame. In line with the previous DAC
To: Peter Ellis	advice I will relay this to the Bells Adviser and bring this matter back to
From: Caroline	the DAC for their further consideration. The next DAC meeting takes
Hilton	place on 18 December and as the submissions deadline has passed, we
	may possibly be able to squeeze this on as an extra agenda item –
	however if this is not possible then the next DAC meeting will take place
	on 22 January and it would definitely be included on the agenda for
	that.
11/12/2020	We have now heard back from the DAC bells advisor and DAC reviewing
	architect ahead of the meeting next week. These comments and those
To: Peter Ellis	of your church architect will be brought before the committee for
From: Katy Purvis	further discussion, so please let us know if you wish to add your own
	response. We acknowledge that the architect and advisor are not in
	agreement at this stage, the Committee will consider the merits of each
	view.
	The bells advisor commented as follows
	"I note the concerns relating to the frame by the reviewing
	architect and the comments of the Church Architect.
	It is really important to note that at the end of the proposed
	work we are aiming to have a ring of bells that can be easily
	rung and will remain in a good state for many years into the
	future.
	The Taylor's report clearly documents a number of major issues
	with the bell frame, some of which are related to the original
	design used at the time of manufacture (the need to cut away
L	

parts of the frame sides to allow the bells to swing), but mainly due to the age of the frame.
The report shows significant movement of the frame in all directions which is unacceptable and which must make ringing accurately quite challenging. This level of movement will deteriorate over time causing more issues. It also discussed that the bells will be rehung in new headstocks, thus requiring more of the frame to be cut away to allow them to swing within the frame (they would be hung closer to the headstock to improve the timing and 'go' of the bells and therefore swing with a smaller radius).
The report further details that they are unable to find a trapdoor in the belfry floor. In some cases there is no trapdoor, the floor having been completed after the installation of the bells - if this is the case then access will have to be created to allow removal of the bells.
It is clear to me from this report that the bellframe is reaching the end of its useful life. Strengthening work can be undertaken which may or may not improve the situation. However it is likely that the installation will then continue to slowly deteriorate over the coming years. This deterioration will make ringing slowly more and more difficult and the frame will then require replacement (if there remains an active band and adequate funds). I do not believe this frame will continue to function for another 200 years even with all possible bracing and strengthening.
This is a difficult decision but it is important to remember that the function of a ringing installation is to ring and call people to Church. Ringing will only continue if the instrument used is of sufficent standard to allow easy, accurate ringing and easy teaching and development of new ringers. Currently this installation does not meet these criteria (hence the request for refurbishment).
Maintaining an old, failing frame risks having a set of bells that are slowly rung less often as they become more difficult to ring. This can over time lead to a reduction in the number of ringers and eventually no local band and a silent tower.
I agree that it is entirely appropriate to preserve parts of the frame for future historical reference as proposed by Taylor's in their report. However I feel that preserving the whole frame with strengthening will at best improve the situation for only a few decades and at worst only partially improve the situation.

	Completion of these works including a new bellframe will deliver
	a bell installation that will be easy and accurate to ring, allow teaching and hopefully continued ringing at this site for many years to come."
	The architect commented
	"My advice remains the same, just because it is a bell frame doesn't mean that 277 year old primary fabric from a Grade I Listed building can be removed without detailed justification. It will be over to the church to prove beyond doubt that the bell frame has had its day and cannot be adapted to modern usage."
11/12/2020	Many thanks. I think the reports you have from the three tenderers cover our views at present.
To: Katy Purvis From: Peter Ellis	
23/12/2020 To: Peter Ellis From: Katy Purvis	DAC Advice I am writing to let you know that at its meeting of 18 December 2020, the DAC considered the comments of the church architect on the repair, and resolved to offer the following informal advice:
	 a. The Committee appreciated the virtues of replacing the bell frame, but there are strong arguments against this. The Church Buildings Council, which the DAC will be obliged to consult, has a strong presumption against the replacement of historic bell frames but may accept amendments to an existing frame. (It will therefore be easier for the DAC to recommend refurbishment than replacement.) b. The parish should obtain an independent view from a structural engineer regarding the feasibility of retaining and strengthening the existing bell frame. This will need to be carried out before the DAC office consults the Church Buildings Council, as the findings will need to be included with the consultation documentation
22/01/2021 To: Peter Ellis From: Caroline Hilton	Further to the DAC advice relayed to you in Katy's message of 23 December (below), we have received the following announcement this afternoon from the Church Building Council regarding grants for conservation work to historic bells or bell frames. I wished to draw your attention to this in case it may be of use to you .
	Bell grants The next closing date for bell and bell frame grants is 22 February 2021 for decisions in May 2021. Full criteria and an application form are available <u>online</u> . Please encourage applications from churches planning conservation work to historic bells or bell frames.
27/01/2021	Further to the Diocesan recommendation to employ a Consultant to advise on the bells refurbishment it is proposed to use the following:-
To: Katy Purvis From: Peter Ellis	Mr Adrian Dempster, CEng MICE MIStruct E from Nottingham. Adrian is a structural engineer, a bellringer, and is or has been structural advisor

	to the Diocese of Southwell. He has been a director of Ward Cole, consulting engineers; though he is now semi-retired, he continues to work part time as a consultant for them. He has been consulting engineer to other bell restorations, and some years ago produced an excellent report on his inspection of the bells and tower at Crewe (St Mary).
	Please confirm that Mr Dempster would be acceptable to the Diocese for this purpose
27/01/2021	Mr Dempster's credentials look sound to me, he appears to me to be a
To: Peter Ellis From: Katy Purvis	good choice to advise on the bell frame. I've found evidence of his advice on other proposals nationally. Can you please clarify his involvement in Southwell DAC, as I have seen documentation which lists him as Reverend, and I'm not sure that is the same person, or whether he is both ordained and an engineer?
27/01/2021	The following is the DAC committee Membership as listed or The
-	Diocese of Southwell. As you can see it lists Mr Adrian Dempster as a
To: Katy Purvis	member.
From: Peter Ellis	
	https://southwell.anglican.org/church-life/churches/your-church- building/diocesan-advisory-committee/
22/04/2021	I response to your email of 23 December 2020 I now attach a copy of
22/04/2021	the Consultants report on the Bell frame. I have today forwarded a copy
To: Katy Purvis	to our Architect Mr N Rank and invited his comments.
From: Peter Ellis	
	5) Structural Report of Ward Cole Consulting Engineers dated April 2021
With attachment	
27/04/2021 To: Katy Purvis From: Peter Ellis	I am about to send this for architect and bells advisor review, but it occurred to me that they may ask what the parish's opinion is, in the light of the report, would you now wish to replace or repair the bellframe?
27/04/2021	Sorry yes it is the intention of the church to retain the existing frame
To: Katy Purvis From: Peter Ellis	
11/05/2021	With apologies for the delay, we have now heard back from the DAC bells advisor regarding the report. I was hoping to send the architects
To: Peter Ellis From: Katy Purvis	comments at the same time, so had been hanging on for them, but they are not yet received. The proposals will be discussed at the next DAC meeting, 21 May.
	The bells advisor commented
	<i>"Many thanks for letting me see this report and informing me that the Parish now wish to retain the frame.</i>

	This is an excellent and comprehensive report from someone with good knowledge of bell ringing.
	I am pleased to note that he feels that strengthening of the frame and work on the anchor points will allow the Parish to retain the frame and allow the frame to function well for full circle ringing.
	I am happy to agree that this is the best way forward."
	I notice you haven't completed the online faculty application yet, it might be a good idea to do that quite soon, as I would expect the DAC to be supportive of the proposals in the light of the report.
11/05/2021	Sorry but I am still awaiting a response from the Architect.
To: Katy Purvis From: Peter Ellis	
11/05/2021 To: Peter Ellis	That's fine, I meant I was waiting for the DAC reviewing architect's comments, rather than Nick's to you, but both would be helpful
From: Katy Purvis	
11/05/2021	Thank you for your email. Ward Cole are well know as engineers for the
To: Peter Ellis From: Nick Rank of Buttress	expertise in connection will bells and towers and their report makes sense. I am happy for the proposed work that they recommend to go ahead, it won't have any significant impact on the historic fabric of the tower.
	l am arranging for Steve Welsh, who worked with me on the tower masonry work, to pick up on the lead ridge issue.
28/05/2021	DAC Advice
To: Peter Ellis From: Katy Purvis	I am writing to let you know that at its meeting of 21 May 2021, the DAC considered the report on the bell frame, and resolved to offer the following informal advice:
	 a) The Committee was supportive of the revised proposals to strengthen the bell frame rather than replace it b) As this is a Grade 1 listed building, the DAC office will now carry out the necessary consultation with the Church Buildings Council
25/06/2021	Please could you complete the petition form on the online faculty
To: Peter Ellis From: Katy Purvis	system, and submit the application? I will then be able to refer the proposals to the CBC
25/08/2021 To: Peter Ellis From: Katy Purvis	DAC Advice I am writing to let you know that at its meeting of 24 August 2021 the DAC Standing Committee considered the proposals for the refurbishment of the bells and bellframe.
	Due to the Grade 1 listing of the church the responses of the full DAC had been sought prior to the meeting (the details for the repairs having

	been previously circulated to the full DAC). The Sub-Committee was content with the proposals and noted the majority of the DAC had responded prior to the Standing Committee and all the respondents had voted to recommend the proposed repairs.
	 I can therefore advise you that subject to receiving satisfactory feedback from the Church Buildings Council (CBC), the Committee resolved to recommend the scheme, with the following proviso: a) The works to the bell frame to be under the direction and subject to the inspection of the Church Architect
	This means that when we have support for the proposals from the CBC, Caroline will be able to raise the Notification of Advice so the application can progress onto the stage where public notices can be displayed.
13/10/2021	Please can you advise me as to where we are up to with our faculty application for the bells. Are we still awaiting consultations or should I
To: Katy Purvis From: Peter Ellis	be doing something? Many thanks My PCC are becoming impatient!
19/10/2021	I'm sorry for the delay, we are waiting for the Church Buildings Council to comment, they did say they may need to visit you to see the bells and
To: Peter Ellis From: Katy Purvis	bell frame, I will ask for an update. There isn't anything you need to do
08/11/2021	Do you have any further information on the above? We are receiving requests for information from the Cheshire Guild of Bell Ringers and
To: Katy Purvis From: Peter Ellis	various trusts. We have heard nothing from the Church Building Council?
08/11/2021	I received an apology from the case worker at CBC this morning, sent yesterday, saying she was sorry for the delay, is working on the case
To: Peter Ellis From: Katy Purvis	now and would let us know as soon as possible. So hopefully we will hear very soon.
15/11/2021	I have passed your contact details to Jacinta this morning so that you can arrange a visit to discuss the bells proposals
To: Peter Ellis From: Katy Purvis	Hope that's Ok, and that some progress will result
17/12/2021 To: Peter Ellis From: Katy Purvis	Please see attached advice from the CBC regarding the bells and bell frame. I've put this on the agenda for the January 21st DAC meeting, and hopefully we can progress this then
With attachment	CBC advice
20/12/2021	Is there any further information required at the moment for our Faculty/Advice/consultation that would be helpful before the DAC
To: Katy Purvis From: Peter Ellis	meeting? We have requested and are currently awaiting an updated tender from our preferred tenderer. (See attached documents)
With attachments	Superseded description of proposed bell removal of Whites of Appleton Ltd
	dated 24 June 2021S Superseded preferred Supplier report of parish dated 30 September 2021, Whites Latest Tender (awaiting update)

05 (04 (0000	
05/01/2022	Happy new year, thanks for sending these, I've put the proposal on the agenda for the next meeting and will send these documents for review.
To: Peter Ellis	I'll let you know if there are any queries.
From: Katy Purvis	
	Please can you confirm as to whether you intend to tune the bells, as
	described in the attachment, as that was opposed by the CBC in their
	advice?
05/01/2022	I have just this morning received the attached quotation which includes
••••	reference to the tuning of the Bells. I hope this helps to clarify the
To: Katy Purvis	situation. It is currently the intention of the Church to follow the CBC
From: Peter Ellis	advice and not to re tune the Bells although as you can see that Whites
	are still recommending that this be done.
With attachment	
	Superseded quotation and proposals of Whites of Appleton Ltd dated 5
	January 2022
05/01/2022	Thanks Peter, that's great, I've sent it on to the reviewers
05/01/2022	Thanks reter, that's great, i've sent it on to the reviewers
To: Peter Ellis	
From: Katy Purvis	
06/01/2022	We have now heard back from the Bells Advisor and DAC architect as
00/01/2022	follows
To: Peter Ellis	
From: Katy Purvis	The Bells advisor comments as follows, he is aware that you are not
FIOH. Raly Fulvis	intending to return the bells, but sent this reply before he had seen the
	second email and revised quotation.
	"Thank you for including the very helpful report from the CBC and further
	reports from the Church and Whites Bell Hangers.
	l eports from the church and writes ben hangers.
	I note that the CBC consider the bells and frame to be worthy of listing and
	of significance. I apologize that I was not fully aware of all details relating to
	these bells when first asked for advice. I presumed that appropriate
	bells/frames were already listed, and I wonder whether this document
	means that CBC are now intending to list them (or whether this needs to be
	done by the Church). In the future I will look more closely at unlisted bells
	before replying.
	bejore replying.
	I am happy for the work to proceed to repair/strengthen the frame and
	replace the fittings as outlined in the report.
	I do agree that there would need to be a very strong case made by the
	I do agree that there would need to be a very strong case made by the Church to recommend tuning of these bells as they appear to be untouched
	3 1
	(from a tuning point of view) since the time of installation. It appears from
	the CBC report that the ringers and Church are happy with the sound of
	their bells and therefore tuning is not required.
	I note that work will need to be done to allow the balls to be taken down
	I note that work will need to be done to allow the bells to be taken down
	from the belfry (required to allow cleaning and the preparation work and
	fitting of the new headstocks). It appears that there is a route via the clock
	chamber to the ringing room (though this will require dismantling part of

	the frame and lifting some of the floor boards). However, as is common with many Churches, it appears that the original entry route through the ringing chamber floor was covered during the fitting of the floor boards. Some floor boards would therefore require lifting (and later re-fitting) to allow the bells to be removed. It would be sensible from a bell ringing point of view for a trapdoor to be left in place to avoid a repeat of this issue in the future. I am aware that this would require advice from the DAC architect as this structure is of the same age as the bells. The only alternative way of removing the bells would be via the louvres - a route that has the same issues of requiring work done to the historic structure (and would be significantly more expensive)."
	The architect reviewer commented
	<i>"I will defer to the Bells Advisor on all aspects of the Bells' refurbishment.</i>
	The unanswered questions, apart from whether or not the bells are to be retuned or not are :
	What are the proposals for the new hatch? I presume that the original is not in existence so a drawing will be required. Is any other built fabric affected by the route of the bells and is any protection required to eg. historic floor finishes? I would recommend that the Church Architect oversees all the issues relating to the collateral fabric.
	In my experience, bell frames are generally exposed to the elements and I wonder if the Bells Advisor thinks that galvanised fixings are OK; my instinct would be for a suitable stainless steel?"
	The Bells Advisor advises that painted galvanised fixings as described in Whites schedule are standard and although will need attention every ten years or so, should last hundreds of years.
	Please could you contact your church architect, Nick Rank regarding the access hatch? The DAC will consider the CBC and above advice at the next meeting, but the access hatch is really the key point for now
26/01/2022	DAC Advice
To: Peter Ellis From: Katy Purvis	I am writing to let you know that at its meeting of 21 January 2022, the DAC considered the report of the Church Buildings Council regarding their recent visit, and resolved to recommend the proposals for the bells and bellframe, with the following proviso:
	a. The works to be under the direction and subject to the inspection of the Church Architect
	The Committee also wished to offer the following informal advice:

	a. The parish should record the details of how the access hatch is designed and installed and to also share this information with the DAC office to keep on file
	This means that Caroline will now be able to raise the Notification of Advice, which will allow you to generate the public notice
26/02/2022	Further to my recent mail I am attaching the Architects latest proposals for the Bell Chamber Hatch.
To: Katy Purvis From: Peter Ellis	4) Brief Statement of Significance for Ringing Chamber Floor of Buttress6) Drawing number (4)01 Revision A 'Proposed opening to allow for
With attachments	lowering of bells' of Buttress dated January 2022
27/02/2022 To: John Webster, George Colville, Peter Robson, Chris Hughes, John Vickers, Peter Ellis	You have asked me whether Whites Revised Estimate for rehanging the Audlem bells in a repaired frame has sufficient information to consider it for a CBC grant, presumably when the Committee meets on the 6 th April 2022. My personal view is that more information is needed and, since time is short, I have decided to share my thoughts with the parish (for their consideration) and the Chester DAC (who might still be considering this before recommending it to the Chancellor); please see
From: Graham Pledger With attachments	the attached file. You will see that I am recommending a drawn record of the frame, something which CBC has encouraged in the past and funded from a separate survey budget. I have already spoken to Dr John Eisel from Hereford who is prepared to do this; it would be good if he could be commissioned and asked to report if possible in time for the April Meeting.
	You will also see that I am asking for further information from Adrian Dempster, the PCC's Structural Engineer, and asking him to consider an alternative detail for the foundation beam ends. Similarly, I am asking Whites (or the appointed bellhanger) to confirm a particular tie rod detail (which unlike traditional tie rodding won't weaken this particular frame type) and, once they have the record drawings, to mark up the position of all strengthening proposals.
	You will know of course that any grant depends a lot on the listing status of the bells and bellframe. I know that the CBC letter last December considered that both were worthy of listing, but does the PCC/DAC need to be submitting this application now, or has this already been done?
18/03/2022	Extract of the minutes of the DAC meeting of 18/03/2022 Further to Minute 14, 21/01/2022, the Committee noted an adviser from the CBC who had not been involved in their site visit had contacted the parish directly, copying in the Diocesan Secretary and advised them not to carry on with the faculty application until his queries had been addressed. This had happened after the DAC had already received and had due regard for the CBC feedback and had recommended the scheme subject to the parish providing details of the bell chamber

	hatch. It noted the parish had applied for a CBC grant and the CBC grants officer had asked their adviser for comments on the scheme, and the adviser had subsequently contacted the parish directly with comments and copied in the Diocesan Secretary. The comments had included that the faculty process should not be formally concluded. The Chair commented that it was outside of the adviser's remit to tell the parish that the faculty process should not be formally concluded, and the Diocesan Secretary concluded and the faculty process should not be formally concluded.
	the Diocesan Secretary should not have been copied in. It was noted that the DAC office has contacted the CBC to query the nature of this advice from their adviser. The CBC have advised this is being discussed and will reply in due course.
	The Committee also noted that the required details of the bell chamber hatch had now been provided.
	The Committee wished to offer the following informal advice: a. It noted that the CBC had seen fit to offer feedback as part of the faculty application process without the adviser contributing. The DAC had taken full account of the CBC advice and gone on to recommend the scheme subject to advice regarding the hatch door.
	 b. It encouraged the parish to proceed with the display of public notices. If the parish went on to make any changes to the proposals they could be dealt with as a Variation request as it was not expected that any amendments would be problematic for the DAC and probably not of a nature that would require public notices.
	c. The DAC office should continue its enquiry with the CBC about this late advice which was completely out of sync with the faculty process which had been correctly followed by the DAC and parish and had subsequently put the parish and DAC in an awkward position.
20/06/2022	Further to our conversation earlier I am attaching the following
To: Caroline Hilton	documents:-
From: Peter Ellis	1. Audlem Bell Restoration-Preferred Supplier
With attachments	2. John Taylor revised quotation
	3. Whites of Appleton revised quotation
	Your advice on updating the faculty application would be appreciated.
	7) Audlem Bell Restoration-Preferred Supplier report dated 18 June 2022 Revised preferred quotation and proposals of John Taylor & Co dated 30 May 2022

	Revised quotation of Whites of Appleton Ltd dated 18 May 2022
22/06/2022	Extract of DAC meeting minutes
	Further to Minute 4, 18 March 2022, the Committee considered the
	proposed change of contractor for the work that has already been
	recommended
	The Committee RESOLVED that:
	a. It was content, subject to there being no change to the
	specified works, for the recommendation to stand, and the
	DAC office should liaise with the Registry as to the
	appropriate way of processing this change in the faculty
	application
15/08/2022	Are you in a position to be able to give me an update as to how I should
	proceed with the changed tender details for the Faculty. I am not sure
To: Katy Purvis	of the stage we are up to with the DAC?
From: Peter Ellis	
30/08/2022	I am having difficulty in updating the petition for our Bells project.
	Please can you advise? The Bell ringing team are becoming concerned
To: Katy Purvis	at the delay.
From: Peter Ellis	
06/09/2022	I've amended the notification of advice now,so this should be Ok for you
	to complete
To: Peter Ellis	
From: Katy Purvis	
07/09/2022	Unfortunately there are still a couple of items which need changing on
Tot Koty Dumin	the Petition Form:-
To: Katy Purvis From: Peter Ellis	All in Accordance with:-
FIOITI. PELEI EIIIS	should read
	Ward Cole report date should be 27/4 /22 not 24/4/21
	Quotation date should be 18/7/22 not 30 May 22
26/09/2022	You may not have seen this revised sketch of the Bell frame to be read
	in conjunction with the Ward Cole report
To: Katy Purvis	
From: Peter Ellis	8) Drawings numbered SK04 and Sk05 of Ward Cole Consulting
	Engineers both dated 27 April 2022
With attachment	
26/09/2022	I think I now have all the information to complete the Faculty. Please
	can you advise me as to where we are up to with the amendments?
To: Katy Purvis	
From: Peter Ellis	
26/09/2022	I think I now have all the information to complete the Faculty. Please
	can you advise me as to where we are up to with the amendments?
To: Peter Ellis	
From: Katy Purvis	
26/09/2022	Hi Peter, I am waiting for you to send the latest report/quotation, as I
	need to amend the notification of advice. The last set of documents you
To: Peter Ellis	sent over were not the most recent, which we haven't seen yet.
From: Katy Purvis	

26/09/2022	My apologies I thought I had sent you these
To: Katy Purvis	
From: Peter Ellis	Audlem Bell Restoration – Preferred Supplier (already received 20/06/2022)
With attachments	Superseded - Revised Specification and Quotation of John Taylor & Co dated 8 July 2022
13/10/2022	I apologise for the delay in responding. Please find attached our decision letter.
To: John Vickers From: John Webster of CBC	Contents of CBC grant decision letter dated 13 October 2022:
Webster of CBC	Audlem, St James the Great (Diocese of Chester)
	Conservation of bells and bell frame.
	Thank you for forwarding John Taylor & Co's proposals for the work to the bells and bell frame dated 30t ^h May 2022. When the Council gave its advice in December 2021, it welcomed the retention of the timber frame and stated that full details of the proposals should accompany the faculty petition. This advice was given on the basis of the Ward Cole report which recommended repairs which it was understood would not overly impact on the character of the
	timber frame in the tower. Details of the repair were not available to the Council at that time. As the proposals have been developed by your chosen bell hanger the amount of metal work specified to secure the frame has increased, to the extent that the historic character of the timber bell frame would be lost. Keeping its character is an important outcome of the advice that it was retained in use in the tower. If a repair that perpetuates the historic character of the bell frame is unrealistic, then the reason for its retention is undermined. Therefore, if a repair using traditional carpentry skills is not possible the Council would not
	 continue to advise in favour of the restoration of the frame. When the Bells Committee of the Church Buildings Council met in April 2022, it noted that significant doubts had been raised about the possibility of producing strengthening proposals that would enable the bellframe to perform to an acceptable standard for the foreseeable future. Unfortunately, the current proposals do not address these concerns.
	The Council is unable to grant aid this project while it has doubts over the proposals for the bell frame. Given the significance of the bells it hopes that a way forward can be found either by replacing the current frame or with traditional repairs of the current frame.
14/10/2023	Our Bell Ringing team are asking-Does the attached letter, just received, change the views of the DAC?
To: Katy Purvis	
From: Peter Ellis	
21/10/2022	John Vickers has asked that I send you the two attachments, giving his any my views of the situation before our tech committee meeting this
To: Katy Purvis	morning.

France Chris	Murate in the final years inductor the measure that Vel like to prove the
From: Chris	My note, in the final para, includes the message that I'd like to convey to
Hughes	the DAC.
With	9) Audlem Frame – a Non-Technical View
attachments	
	9) Audlem Frame – CDH Thoughts 20/10/2022
24/10/2022	The DAC were very sympathetic to your views on Friday, we will see if
Tay Chuis Llushaa	we can get to the bottom of the CBC advice and work from there
To: Chris Hughes	
From: Katy Purvis	
24/10/2022	Thanks for the information, Katy. Really good news that the DAC had
T K N D	time to consider the Audlem bell restoration.
To: Katy Purvis	John Vickers tells me that you're trying to 'unpick' the state of things, and
From: Chris	suggests I send you the attached timeline, which shows the entire
Hughes	history starting just three years ago. I produced it to give myself a
	clearer view of the whole story, with its conflicting advice from different
	technical experts, and different bell hangers. I hope you find it useful,
	too.
	10) ABRA Timeline
25/10/2022	Thanks Chris, this is great, and matches my understanding of events. I
	did try to speak to John Webster yesterday and left a message. I will try
To: Chris Hughes	again today. I have finally managed to go through the July quotation
From: Katy Purvis	from Taylors and picked out what was different from the quotation that
	the DAC recommended in June.
	Unfortunately I wasn't at the June meeting, and the revised quote was
	looked at as an extra item, similarly to this month with the CBC letter, so
	it was not clear at the time how much that Taylors quote differed from
	the previously recommended Whites quote. The June recommendation
	was subject to it being broadly the same, so I may need to look again at
	the differences between the latest quote and the first
25/10/2022	I may have something that will tell you about differences between the
	Taylor's and Whites quotes. I don't have time this morning, but will look
To: Chris Hughes	into it later in the day.
From: Katy Purvis	
27/10/2022	DAC Advice
	I am writing to let you that at its meeting of 21 October 2022, the DAC
To: Peter Ellis,	considered the response of the CBC to the grant application and
Chris Hughes	resolved to request that the DAC office establish a timeline of events
From: Katy Purvis	and write to the CBC with a form of words to set out the following
	points:
	1. A timeline of correspondence and events relating to the CBC
	involvement and DAC consideration of this matter
	2. The parish had revised its proposals in line with someone's
	advice apparently speaking on the CBC's behalf but the CBC is
	now rejecting the scheme and this is obviously causing
	problems for the parish.
	3. The DAC was therefore seeking clarification from the CBC.
	5. The DAC was therefore seeking clarification from the CBC.

1 cannot promise it will be actioned immediately. If you have any queries please let me know17/11/2022Can you tell me when the DAC meeting is this month? I guess there may be some more discussion of the Audlem bell restoration - particularly if the resolution below has made any progress. If there's any way we can help move things on, please do let me know (John V is away for a few days, so I'm writing in his place).17/11/2022It is tomorrow, but Audlem isn't on the agenda. I'm afraid it has been a very hectic few weeks and I haven't been able to progress the action required of me yet. However it is the next item on my to do list, so I can hopefully start it tomorrow morning before DAC if possible21/11/2022Thank you for your phone call this morning, and for all you're doing to move things forward. We are mailing Taylors to ask them to show the proposed metalwork on a copy of the Eisel frame diagrams, so that the CBC can assess the solution. We're also asking Taylors about their availability for a meeting at Audlem. I have contacted Adrian Dempster, who says he'd currently be available for a meeting on 7, 9, 16, 20 or 21 December. He warns me that his diary fills up quickly! I am copying this mail to John Webster, so that he can see those dates too.21/11/2022The 16th and 21st are possibilities. I will confirm later in the week.	From: John Webster of CBC 30/11/2022 To: Katy Purvis, John Vickers, John Webster of CBC From: Chris Hughes With attachment	 Following recent emails and phone calls, we asked Taylors to provide versions of the John Eisel frame diagrams, marked up with their proposed steelwork. I attach a copy of these. You will see that the solution has steel cleats at the corners of the frame pits and anchoring the base sills to the foundation beams; and tie rods between the top and bottom sills of the frame. Taylors have said "it could be that an abundance of vertical tie rods might not be needed, but this will not be known until the frame has been seen with all of the bells ringing". In addition to the cleats and tie rods, of course, there will be brackets supporting the main beams in the clock chamber, as agreed
I cannot promise it will be actioned immediately. If you have any queries please let me know17/11/2022Can you tell me when the DAC meeting is this month? I guess there may be some more discussion of the Audlem bell restoration - particularly if the resolution below has made any progress. If there's any way we can help move things on, please do let me know (John V is away for a few days, so I'm writing in his place).17/11/2022It is tomorrow, but Audlem isn't on the agenda. I'm afraid it has been a very hectic few weeks and I haven't been able to progress the action required of me yet. However it is the next item on my to do list, so I can hopefully start it tomorrow morning before DAC if possible21/11/2022Thank you for your phone call this morning, and for all you're doing to move things forward.To: Katy PurvisThank you for your phone call this morning, and for all you're doing to move things forward.To: Katy PurvisHughesFrom: Chrisacopy of the Eisel frame diagrams, so that the CBC can assess the solution. We're also asking Taylors about their availability for a meeting at Audlem.I have contacted Adrian Dempster, who says he'd currently be available for a meeting on 7, 9, 16, 20 or 21 December. He warns me that his diary fills up quickly! I am copying this mail to John Webster, so that he can see those dates		The 16th and 21st are possibilities. I will confirm later in the week.
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	To: Katy Purvis From: Chris	unacceptable Thanks to the helpful information you have provided over the last week or so, we should be able to progress this reasonably promptly, although I cannot promise it will be actioned immediately. If you have any queries please let me know Can you tell me when the DAC meeting is this month? I guess there may be some more discussion of the Audlem bell restoration - particularly if the resolution below has made any progress. If there's any way we can help move things on, please do let me know (John V is

30/12/2022	I have no adverse comments to make on Simon's proposals.
With attachment	
To: Katy Purvis, John Vickers, Chris Hughes, Adrian Dempster of Ward of Cole From: Simon Adams of John Tayor & Co	05 showing the beam end support details which I agreed with Graham Pledger. Can someone ensure that John Arthur is sent a copy please? Please let me know if you have any queries or require any more information. Drawings numbered SK04 and SK05 of Ward Cole Consulting Engineers both dated 27 April 2022 (already received 26 September 2022)
From: Claire Smith of CBC 28/12/2022	<i>Guidance documents re Statements of Significance</i> Further to our meeting last week, I have attached my sheets SK/04 and
22/12/2022 To: Katy Purvis	Many thanks for meeting us at Audlem yesterday. Please find attached documents from John on statements of significance. I appreciate you offering to help the parish with this.
16/12/2022	 Excerpt of the minutes of the DAC meeting of 16/12/2022 Further to Minute 15, 21/10/2022 the Committee noted the DAC office had been in contact with the CBC, and that a meeting with the CBC at the church is planned for 21 December. a. The Committee awaited the outcome of the forthcoming meeting with the CBC at the church
09/12/2022 To: Katy Purvis, John Vickers, Chris Hughes From: Claire Smith of CBC	Myself and John Arthur from the Church Buildings Council's bells committee will be able to attend this site visit on Wednesday 21 st December. Would 11am – 1pm suit others for the meeting time? John and I will both be travelling from York to Crewe, and sharing a taxi from there so that time works with trains (if, of course, they are running smoothly).
	 main beams. In fact, Taylors have not found it necessary to use steel cross bracing and plates. I hope you find this helpful. Please let me know if you have any questions. Superseded marked up J Eisel frame diagrams (stamped John Taylor & Co) dated 28 November 2022
	recommendations in section 4 of his report. Further, Taylors have said "All of the above works are standard timber frame reinforcing practice". Taylors report (16 July 2020 and 8 July 2022) provided a list of steel strengthening items that might be used, "such as" corner cleats, cross bracing, plates to fit on the sills and braces, tie bars, and support for the

To: Simon Adams	
of Taylor & Co,	
John Vickers, Chris	
Hughes	
From: Adrian	
Dempster of Ward	
Cole	
Cole	
30/12/2022	Following on from the site meeting and bellframe testing and
50/12/2022	measurements taken on 21 st December, and the agreed plan to adjust
To: John Vickers,	and refine the method of frame strengthening works, please find
Chris Hughes, Katy	attached our revised specifications formed to concur with the way
	forward.
Purvis, Claire	Torward.
Smith of CBC	
From: Simon	14) Device of Constitution (Constitution Children Technology, 1997) 100
Adams of John	11) Revised Specification & Quotation of John Taylor & Co dated 30
Taylor & Co	December 2022
With attachment	
03/01/2023	For the avoidance of any doubt, please can you send the latest set of
	your drawings of the bell frame strengthening proposals and the latest
To: Simon Adams	Buttress drawing for the hatch?
of John Taylor &	
Co	
From: Katy Purvis	
04/01/2023	Thanks for this, and for doing it so quickly.
	The technical proposal looks good to me.
04/01/2023 To: Simon Adams	The technical proposal looks good to me. I do have a question on pricing.
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To: Simon Adams	The technical proposal looks good to me. I do have a question on pricing.
To: Simon Adams of John Taylor & Co, Adrian	The technical proposal looks good to me. I do have a question on pricing. Quotation 1.0 says it is for "the work in the specification above", which
To: Simon Adams of John Taylor & Co, Adrian Dempster of Ward	The technical proposal looks good to me. I do have a question on pricing. Quotation 1.0 says it is for "the work in the specification above", which includes (in the Dismantling section) both the opening of the 'shifter' frame side and the removal of the clock hammer quadrants. However,
To: Simon Adams of John Taylor & Co, Adrian Dempster of Ward Cole, John Vickers,	The technical proposal looks good to me. I do have a question on pricing. Quotation 1.0 says it is for "the work in the specification above", which includes (in the Dismantling section) both the opening of the 'shifter' frame side and the removal of the clock hammer quadrants. However, Appended item 1.7 implies an extra cost for these items. Similarly,
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E C'	
From: Simon Adams of John Taylor & Co With attachments	Drawing number (4)01 Revision A 'Proposed opening to allow for lowering of bells' of Buttress dated January 2022 (already received 26 February 2022) Marked up J Eisel frame diagrams (stamped John Taylor & Co) dated 28 November 2022 (already received 30 November 2022)
13/01/2023	Excerpt from the meeting of the DAC of 13/01/2023 Further to Minute 7, 16/12/2022 the Committee considered the informal report of the Assistant to the DAC Secretary following the meeting with officers of the CBC at the church. It was noted that the CBC bells expert on the visit gave no indication as to whether they were supportive or not and the CBC report was still awaited (delayed due to sickness). It was noted that during the visit the CBC also asked for the Statement of Significance to be updated to reflect the significance of the bell frame. This has been carried out, but it was noted that it was only last year that the bellframe was first considered of particular significance (and the works had previously been recommended with the original Statement of Significance).
	It was noted that when the bells were rung during the visit the tower had moved. The Bells Adviser explained how bell towers are designed to flex and move when the bells are being rung, but the frame should not move. He explained that if the frame moves it acts as a hammer and damages the tower. He noted that in this case it sounds like the frame is flexing, meaning the bearings will no longer be aligned; this creates difficulties in ringing and eventually damage to the strike. He noted this is a difficult case; adding that the wood needs to be preserved, eg by putting a frame underneath (however there is not room to do this in this church tower). He noted he had not seen wood used to support wood (as requested by the CBC), and steel (which more normally be used) acts like a 'cast for an arm'. It was commented that to help the parish obtain the grant they need to be able to carry out the work, the CBC bells committee would need to be persuaded to support the scheme. The Committee <u>RESOLVED</u> to offer the following informal advice:
	a. It noted the site meeting had taken place and awaited the report from the CBC
16/01/2023 To: Simon Adams of John Taylor & Co From: Katy Purvis	Thanks Simon, these are the same versions as ours, I was just worried that we might have had earlier revisions, thanks for confirming that we all have the latest version
16/01/2023	Thanks for your reply. Did the revised application for faculty get heard at the meeting on Friday?
To: Katy Purvis	

From: Simon	
Adams of John	
Taylor & Co	
14/02/2023	Thanks for the draft SoS. I've been through all the bell bits, and put
	comments in RED ink. John V doesn't have any more to add, so l attach
To: Katy Purvis	my version. Please contact me if you have any questions on what I've
From: Chris	suggested.
Hughes	
	3) Updated Statement of Significance
With attachment	
20/02/2023	Sorry to trouble you again, but things are still going on with the CBC.
To: Adrian Dempster of Ward Cole, John Vickers From: Chris	They have sent a letter to the diocese, asking for further clarification of tie rod positioning etc - which we are discussion with Taylors. They also say:
Hughes	The Council asks for clarity on the expected frame performance (for example, the planned maximum movement), and who is taking responsibility for achieving it.
	Responding to this, Simon (for Taylors) has said
	We expect that the overall horizontal movement of the bellframe will be reduced by 50% after strengthening, and we will take responsibility for that. What we cannot be responsible for is the expected movement in the base cills – that comes within Adrian Dempster's designs, and should be immeasurable after completion of works.
	Can you make a similar statement about responsibility for the effectiveness of base cill brackets conforming to the design that you agreed with Graham Pledger? We will then be able to send both Taylors' and your statement to the CBC, and thus get over one more of their hurdles.
20/02/2023	Provided that the brackets shown on the attached sheets SK_04 and 05
	are fabricated and fixed in accordance with our details, I wouldn't
To: Chris Hughes	expect there to be any differential movement between the ends of the
From: Adrian	foundation beams and the tower walls.
Dempster of Ward	I trust that this is clear, but please let me know if you have any further
Cole	queries.
01/03/2023	DAC Advice
To: John Vickers From: Caroline Hilton	I am writing to let you know that at its meeting of 17 February 2023 the DAC considered the letter from the Church Buildings Council following their visit to the church, and the Committee wished to offer the following informal advice:
1	

	 It encouraged the parish to provide the further details specifying the works to the bell frame as set out by the Church Buildings Council in its response of 24 January 2023
	If you have any queries please do let me know.
01/03/2023 To: Caroline Hilton From: Chris Hughes	Thank you for that. On 22 February I sent mail to Katy, giving the required information, so that the DAC could forward it to CBC. I will forward the mail to you too in a moment.
01/03/2023	Forwarded mail, as promised.
To: Caroline Hilton From: Chris Hughes	Email of 22/02/2023 to Katy Purvis: Thank you for your email of 8 February, attaching the CBC (Claire Smith) advice letter (dated 24 January) following their visit to Audlem before Christmas.
With attachments	We believe that the main points from the CBC letter which required a response are:
	 "The Council asks for clarity on the expected frame performance (for example, the planned maximum movement), and who is taking responsibility for achieving it." "The Council seeks further clarification of the proposed strengthening works to the bell frame a more substantive description of the proposed works, or the proposed works need to be shown on the drawings." I have contacted both Taylors (Simon Adams) and Ward Cole (Adrian Dempster) about these points. I attach : A set of drawings from Taylors, based on those by John Eisel, showing all the proposed frame strengthening, with both plan and horizontal (truss) views. A letter from Taylors giving further description of the strengthening, including the head and base cill cleats, any tie rods that are needed to further reduce frame movement (up to the number shown on the drawings), and tightening of the existing steel plates. The letter also states Taylors' target improvement in the horizontal frame movement, and their responsibility for achieving it. An email from Ward Cole (Adrian Dempster) stating their responsibility for the performance of the brackets that will support the main beams, providing they conform to the Ward Cole specification; both the existing Taylors proposal and the attached letter say Taylors will provide and fit brackets that conform to that specification. (The Ward Cole email references diagrams SK_04 and 05 dated 27/04/22, which the CBC and DAC already have.)

	 I hope you agree that this is an adequate response to the CBC's letter, and that you will forward it to the CBC as soon as possible so that we can, at last, progress! 12) Marked up revised frame drawings (J Eisel) stamped John Taylor & Co dated 28 November 2022, revised 17 February 2023 and further frame drawings 13) Letter of John Taylor & Co dated 21 February 2023 – detailing frame strengthening works proposed <i>Email of Adrian Dempster of Ward Cole to Chris Hughes dated 20/02/2023 (see included above)</i>
07/03/2023	Thank you for your telephone call yesterday which has further
To: Caroline Hilton From: John Vickers	emphasised to me the fact that time pressures are becoming critical in respect of our project. The two main areas affected are one, the expiry of time limited grants, and two, the expiry of Taylor's fixed price contract. The first I will have to deal with myself, but the second requires your help please. This because the fixed price guarantee expires at the beginning of May, and even if a conservative inflationary price rise of ten percent was applied, this would mean having to find another four thousand pounds of funding at least. This would be a huge problem for us.
	I have spoken to the sales director at Taylor's, Simon Adams, this evening and he has offered the following possible solution. If we are able to sign a letter of intent offering a contract subject to a faculty being obtained, he is willing to stand by his latest price. This would also have the added benefits that he would be able to put our project to the front of the queue, and he would also be able to give us a start date for the work. Also there would be no monies payable on signing the letter, only when work started.
	My question for you now please is; does a mechanism exist by which we can get this done? And if so, can this be discussed at the DAC meeting next week?
	Thank you for your time and consideration in this matter,
08/03/2023	Thank you for your message, I'll look into the possibility of a letter of intent and can definitely include this request for discussion by the DAC
To: John Vickers From: Caroline Hilton	next week. I will keep you updated.
08/03/2023	As requested Caroline
To: Caroline Hilton From: John Vickers With attachment	Drawings numbered SK04 and SK05 of Ward Cole Consulting Engineers both dated 27 April 2022 (already received 26 September 2022)

08/03/2023	Many thanks, I have now sent this along with the response/details sent by Chris on 22/02 on to CBC.
To: John Vickers From: Caroline Hilton	
18/03/2023	 Extract from the minutes of the DAC meeting of 17 March 2023 Further to Minute 10, 17/02/2023, the Committee noted the further details provided by the parish in response to the latest CBC feedback, that have now been forwarded on to the CBC. It was noted that the details had been favourably reviewed by the Bells Adviser. The Committee <u>NOTED</u> the further details had been sent to the CBC and awaited their feedback.
19/05/2023	 Extract from the minutes of the DAC meeting of 19 May 2023 Further to Minute 17/03/2023, the Committee <u>RESOLVED</u> to re-recommend the scheme [for the purpose of the Measure, the works are unlikely to result in a material effect] with the following proviso: a) The works to the bell frame to be under the direction and subject to the inspection of the Church Architect

Audlem St James – Bells - Correspondence with parish and others

Attachments are listed according to the numbering on the supporting documents list

- Attachments in brown are included within the overview section
- Attachments in blue are included within the proposals section
- Attachments in purple are included within the PCC section
- Attachments in black italics are superseded and not included within the application

Date	Message
21/08/2020	As a result of concerns for the Bell Hanging at St James Church Audlem
	our Bell Ringing Team commissioned a report on the condition of the
To: Caroline Hilton	Bells. Reports were received from three Companies John Taylor, Blyth.
From: Peter Ellis	and Whites of Appleton. Each Company recommended similar actions
	for complete refurbishment.
With attachment	Due to the complexity of the reports and the fact that substantial work
	has recently been completed on the Tower we felt it appropriate to
	consult both the Diocese and our Architect before proceeding with a
	faculty application. The Wardens and Bell ringers are of the opinion that
	a full refurbishment should be undertaken.
	I am therefore attaching a copy of the Taylor report with the request for
	advice on the next steps to be taken.
	Report and Quotation of John Taylor & Co dated 16 July 2020
02/09/2020	Thank you for your message with report, and my apologies for the delay
	in responding. I will end this to the diocesan Bells Adviser for review and
To: Peter Ellis	will also add this to the agenda for the forthcoming DAC meeting taking
From: Caroline	place on 18 September. We will get back to you as soon as we can with
Hilton	feedback.
	One thing I note is that you mention you received three reports, of
	which you have supplied the one by John Taylor & Co. Would it be
	possible for you to also send me the reports from Blyth and Whites of
	Appleton? It would be helpful for comparison.
02/09/2020	Please find reports attached.
To: Caroline Hilton	Report of Blythe and Co dated 11 May 2020
From: Peter Ellis	Superseded Whites of Appleton report conclusions
	Superseded Writes of Appleton report conclusions
With	
attachments	
02/09/2020	Many thanks for sending those over
To: Peter Ellis	
From: Caroline	
Hilton	
25/09/2020	DAC Advice
	I am writing to let you know that at its meeting of 18 September 2020
To: Peter Ellis	the DAC considered the details you provided relating to the above
	proposals and wished to offer the following informal advice:
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E C "	
From: Caroline	a) It asked the parish to obtain the written comments of the
Hilton	Church Architect regarding the proposals
	b) The church architect's feedback will then be referred (by the
	DAC office) to the Bells Adviser for further comment
	During the discussion, it was the Committee's consideration of the
	structural/architectural elements of the proposals regarding the bell
	frame and access to remove the bells for their restoration that lead to
	the above informal advice. (The proposed works to the bells themselves
	were positively reviewed.)
08/12/2020	I have reviewed the report from John Taylor and Co concerning the
	proposed work to the bell and frame at the church. I am content that
To: Peter Ellis	they have satisfactorily assessed the work within the tower and I am
From: Nick Rank of	happy for them to proceed in accordance with their report.
Buttress	
08/12/2020	Response from Nicholas Rank Architect as received
To: Caroline Hilton	Email of Nick Rank as above
From: Peter Ellis	
09/12/2020	Thank you for your message with the architect comment regarding the
	proposed work to the bells and frame. In line with the previous DAC
To: Peter Ellis	advice I will relay this to the Bells Adviser and bring this matter back to
From: Caroline	the DAC for their further consideration. The next DAC meeting takes
Hilton	place on 18 December and as the submissions deadline has passed, we
	may possibly be able to squeeze this on as an extra agenda item –
	however if this is not possible then the next DAC meeting will take place
	on 22 January and it would definitely be included on the agenda for
	that.
11/12/2020	We have now heard back from the DAC bells advisor and DAC reviewing
	architect ahead of the meeting next week. These comments and those
To: Peter Ellis	of your church architect will be brought before the committee for
From: Katy Purvis	further discussion, so please let us know if you wish to add your own
5	response. We acknowledge that the architect and advisor are not in
	agreement at this stage, the Committee will consider the merits of each
	view.
	The bells advisor commented as follows
	"I note the concerns relating to the frame by the reviewing
	architect and the comments of the Church Architect.
	areanceed and the comments of the charter Arenneed.
	It is really important to note that at the end of the proposed
	work we are aiming to have a ring of bells that can be easily
	rung and will remain in a good state for many years into the
	future.
	The Taylor's report clearly documents a number of major issues
	with the bell frame, some of which are related to the original
	design used at the time of manufacture (the need to cut away
L	

parts of the frame sides to allow the bells to swing), but mainly due to the age of the frame.
The report shows significant movement of the frame in all directions which is unacceptable and which must make ringing accurately quite challenging. This level of movement will deteriorate over time causing more issues. It also discussed that the bells will be rehung in new headstocks, thus requiring more of the frame to be cut away to allow them to swing within the frame (they would be hung closer to the headstock to improve the timing and 'go' of the bells and therefore swing with a smaller radius).
The report further details that they are unable to find a trapdoor in the belfry floor. In some cases there is no trapdoor, the floor having been completed after the installation of the bells - if this is the case then access will have to be created to allow removal of the bells.
It is clear to me from this report that the bellframe is reaching the end of its useful life. Strengthening work can be undertaken which may or may not improve the situation. However it is likely that the installation will then continue to slowly deteriorate over the coming years. This deterioration will make ringing slowly more and more difficult and the frame will then require replacement (if there remains an active band and adequate funds). I do not believe this frame will continue to function for another 200 years even with all possible bracing and strengthening.
This is a difficult decision but it is important to remember that the function of a ringing installation is to ring and call people to Church. Ringing will only continue if the instrument used is of sufficent standard to allow easy, accurate ringing and easy teaching and development of new ringers. Currently this installation does not meet these criteria (hence the request for refurbishment).
Maintaining an old, failing frame risks having a set of bells that are slowly rung less often as they become more difficult to ring. This can over time lead to a reduction in the number of ringers and eventually no local band and a silent tower.
I agree that it is entirely appropriate to preserve parts of the frame for future historical reference as proposed by Taylor's in their report. However I feel that preserving the whole frame with strengthening will at best improve the situation for only a few decades and at worst only partially improve the situation.

	Completion of these works including a new bellframe will deliver
	a bell installation that will be easy and accurate to ring, allow teaching and hopefully continued ringing at this site for many years to come."
	The architect commented
	"My advice remains the same, just because it is a bell frame doesn't mean that 277 year old primary fabric from a Grade I Listed building can be removed without detailed justification. It will be over to the church to prove beyond doubt that the bell frame has had its day and cannot be adapted to modern usage."
11/12/2020	Many thanks. I think the reports you have from the three tenderers cover our views at present.
To: Katy Purvis From: Peter Ellis	
23/12/2020 To: Peter Ellis From: Katy Purvis	DAC Advice I am writing to let you know that at its meeting of 18 December 2020, the DAC considered the comments of the church architect on the repair, and resolved to offer the following informal advice:
	 a. The Committee appreciated the virtues of replacing the bell frame, but there are strong arguments against this. The Church Buildings Council, which the DAC will be obliged to consult, has a strong presumption against the replacement of historic bell frames but may accept amendments to an existing frame. (It will therefore be easier for the DAC to recommend refurbishment than replacement.) b. The parish should obtain an independent view from a structural engineer regarding the feasibility of retaining and strengthening the existing bell frame. This will need to be carried out before the DAC office consults the Church Buildings Council, as the findings will need to be included with the consultation documentation
22/01/2021 To: Peter Ellis From: Caroline Hilton	Further to the DAC advice relayed to you in Katy's message of 23 December (below), we have received the following announcement this afternoon from the Church Building Council regarding grants for conservation work to historic bells or bell frames. I wished to draw your attention to this in case it may be of use to you .
	Bell grants The next closing date for bell and bell frame grants is 22 February 2021 for decisions in May 2021. Full criteria and an application form are available <u>online</u> . Please encourage applications from churches planning conservation work to historic bells or bell frames.
27/01/2021	Further to the Diocesan recommendation to employ a Consultant to advise on the bells refurbishment it is proposed to use the following:-
To: Katy Purvis From: Peter Ellis	Mr Adrian Dempster, CEng MICE MIStruct E from Nottingham. Adrian is a structural engineer, a bellringer, and is or has been structural advisor

	to the Diocese of Southwell. He has been a director of Ward Cole, consulting engineers; though he is now semi-retired, he continues to work part time as a consultant for them. He has been consulting engineer to other bell restorations, and some years ago produced an excellent report on his inspection of the bells and tower at Crewe (St Mary).
	Please confirm that Mr Dempster would be acceptable to the Diocese for this purpose
27/01/2021	Mr Dempster's credentials look sound to me, he appears to me to be a
To: Peter Ellis From: Katy Purvis	good choice to advise on the bell frame. I've found evidence of his advice on other proposals nationally. Can you please clarify his involvement in Southwell DAC, as I have seen documentation which lists him as Reverend, and I'm not sure that is the same person, or whether he is both ordained and an engineer?
27/01/2021	The following is the DAC committee Membership as listed or The
-	Diocese of Southwell. As you can see it lists Mr Adrian Dempster as a
To: Katy Purvis	member.
From: Peter Ellis	
	<u>https://southwell.anglican.org/church-life/churches/your-church-</u> building/diocesan-advisory-committee/
22/04/2021	I response to your email of 23 December 2020 I now attach a copy of
22/04/2021	the Consultants report on the Bell frame. I have today forwarded a copy
To: Katy Purvis	to our Architect Mr N Rank and invited his comments.
From: Peter Ellis	
	5) Structural Report of Ward Cole Consulting Engineers dated April 2021
With attachment	
27/04/2021 To: Katy Purvis From: Peter Ellis	I am about to send this for architect and bells advisor review, but it occurred to me that they may ask what the parish's opinion is, in the light of the report, would you now wish to replace or repair the bellframe?
27/04/2021	Sorry yes it is the intention of the church to retain the existing frame
To: Katy Purvis From: Peter Ellis	
11/05/2021	With apologies for the delay, we have now heard back from the DAC bells advisor regarding the report. I was hoping to send the architects
To: Peter Ellis From: Katy Purvis	comments at the same time, so had been hanging on for them, but they are not yet received. The proposals will be discussed at the next DAC meeting, 21 May.
	The bells advisor commented
	<i>"Many thanks for letting me see this report and informing me that the Parish now wish to retain the frame.</i>

	This is an excellent and comprehensive report from someone with good knowledge of bell ringing.
	I am pleased to note that he feels that strengthening of the frame and work on the anchor points will allow the Parish to retain the frame and allow the frame to function well for full circle ringing.
	I am happy to agree that this is the best way forward."
	I notice you haven't completed the online faculty application yet, it might be a good idea to do that quite soon, as I would expect the DAC to be supportive of the proposals in the light of the report.
11/05/2021	Sorry but I am still awaiting a response from the Architect.
To: Katy Purvis From: Peter Ellis	
11/05/2021 To: Peter Ellis	That's fine, I meant I was waiting for the DAC reviewing architect's comments, rather than Nick's to you, but both would be helpful
From: Katy Purvis	
11/05/2021	Thank you for your email. Ward Cole are well know as engineers for the
To: Peter Ellis From: Nick Rank of Buttress	expertise in connection will bells and towers and their report makes sense. I am happy for the proposed work that they recommend to go ahead, it won't have any significant impact on the historic fabric of the tower.
	l am arranging for Steve Welsh, who worked with me on the tower masonry work, to pick up on the lead ridge issue.
28/05/2021	DAC Advice
To: Peter Ellis From: Katy Purvis	I am writing to let you know that at its meeting of 21 May 2021, the DAC considered the report on the bell frame, and resolved to offer the following informal advice:
	 a) The Committee was supportive of the revised proposals to strengthen the bell frame rather than replace it b) As this is a Grade 1 listed building, the DAC office will now carry out the necessary consultation with the Church Buildings Council
25/06/2021	Please could you complete the petition form on the online faculty
To: Peter Ellis From: Katy Purvis	system, and submit the application? I will then be able to refer the proposals to the CBC
25/08/2021 To: Peter Ellis From: Katy Purvis	DAC Advice I am writing to let you know that at its meeting of 24 August 2021 the DAC Standing Committee considered the proposals for the refurbishment of the bells and bellframe.
	Due to the Grade 1 listing of the church the responses of the full DAC had been sought prior to the meeting (the details for the repairs having

	been previously circulated to the full DAC). The Sub-Committee was content with the proposals and noted the majority of the DAC had responded prior to the Standing Committee and all the respondents had voted to recommend the proposed repairs.
	 I can therefore advise you that subject to receiving satisfactory feedback from the Church Buildings Council (CBC), the Committee resolved to recommend the scheme, with the following proviso: a) The works to the bell frame to be under the direction and subject to the inspection of the Church Architect
	This means that when we have support for the proposals from the CBC, Caroline will be able to raise the Notification of Advice so the application can progress onto the stage where public notices can be displayed.
13/10/2021	Please can you advise me as to where we are up to with our faculty application for the bells. Are we still awaiting consultations or should I
To: Katy Purvis From: Peter Ellis	be doing something? Many thanks My PCC are becoming impatient!
19/10/2021	I'm sorry for the delay, we are waiting for the Church Buildings Council to comment, they did say they may need to visit you to see the bells and
To: Peter Ellis From: Katy Purvis	bell frame, I will ask for an update. There isn't anything you need to do
08/11/2021	Do you have any further information on the above? We are receiving requests for information from the Cheshire Guild of Bell Ringers and
To: Katy Purvis From: Peter Ellis	various trusts. We have heard nothing from the Church Building Council?
08/11/2021	l received an apology from the case worker at CBC this morning, sent yesterday, saying she was sorry for the delay, is working on the case
To: Peter Ellis From: Katy Purvis	now and would let us know as soon as possible. So hopefully we will hear very soon.
15/11/2021	I have passed your contact details to Jacinta this morning so that you can arrange a visit to discuss the bells proposals
To: Peter Ellis From: Katy Purvis	Hope that's Ok, and that some progress will result
17/12/2021 To: Peter Ellis From: Katy Purvis	Please see attached advice from the CBC regarding the bells and bell frame. I've put this on the agenda for the January 21st DAC meeting, and hopefully we can progress this then
With attachment	CBC advice
20/12/2021	Is there any further information required at the moment for our Faculty/Advice/consultation that would be helpful before the DAC
To: Katy Purvis From: Peter Ellis	meeting? We have requested and are currently awaiting an updated tender from our preferred tenderer. (See attached documents)
With attachments	Superseded description of proposed bell removal of Whites of Appleton Ltd
	dated 24 June 2021S Superseded preferred Supplier report of parish dated 30 September 2021, Whites Latest Tender (awaiting update)

05/01/2022	Happy new year, thanks for sending these, I've put the proposal on the
05/01/2022	agenda for the next meeting and will send these documents for review.
To: Peter Ellis	I'll let you know if there are any queries.
From: Katy Purvis	
-	Please can you confirm as to whether you intend to tune the bells, as
	described in the attachment, as that was opposed by the CBC in their
	advice?
05/01/2022	I have just this morning received the attached quotation which includes
	reference to the tuning of the Bells. I hope this helps to clarify the
To: Katy Purvis	situation. It is currently the intention of the Church to follow the CBC
From: Peter Ellis	advice and <u>not</u> to re tune the Bells although as you can see that Whites
	are still recommending that this be done.
With attachment	
	Superseded quotation and proposals of Whites of Appleton Ltd dated 5
	January 2022
05/01/2022	Thanks Peter, that's great, I've sent it on to the reviewers
To: Peter Ellis	
From: Katy Purvis	
06/01/2022	We have now heard back from the Bells Advisor and DAC architect as
Tax Datas Ellia	follows
To: Peter Ellis	The Delle advisory components on follows, he is avong that you are not
From: Katy Purvis	The Bells advisor comments as follows, he is aware that you are not
	intending to retune the bells, but sent this reply before he had seen the second email and revised quotation.
	<i>"Thank you for including the very helpful report from the CBC and further</i>
	reports from the Church and Whites Bell Hangers.
	reports from the end of and writes ben hangers.
	I note that the CBC consider the bells and frame to be worthy of listing and
	of significance. I apologize that I was not fully aware of all details relating to
	these bells when first asked for advice. I presumed that appropriate
	bells/frames were already listed, and I wonder whether this document
	means that CBC are now intending to list them (or whether this needs to be
	done by the Church). In the future I will look more closely at unlisted bells
	before replying.
	I am happy for the work to proceed to repair/strengthen the frame and
	replace the fittings as outlined in the report.
	I do agree that there would need to be a very strong case made by the
	Church to recommend tuning of these bells as they appear to be untouched
	(from a tuning point of view) since the time of installation. It appears from
	the CBC report that the ringers and Church are happy with the sound of
	their bells and therefore tuning is not required.
	I note that work will need to be done to allow the balls to be taken down
	I note that work will need to be done to allow the bells to be taken down
	from the belfry (required to allow cleaning and the preparation work and
	fitting of the new headstocks). It appears that there is a route via the clock
L	chamber to the ringing room (though this will require dismantling part of

	the frame and lifting some of the floor boards). However, as is common with many Churches, it appears that the original entry route through the ringing chamber floor was covered during the fitting of the floor boards. Some floor boards would therefore require lifting (and later re-fitting) to allow the bells to be removed. It would be sensible from a bell ringing point of view for a trapdoor to be left in place to avoid a repeat of this issue in the future. I am aware that this would require advice from the DAC architect as this structure is of the same age as the bells. The only alternative way of removing the bells would be via the louvres - a route that has the same issues of requiring work done to the historic structure (and would be significantly more expensive)."
	<i>"I will defer to the Bells Advisor on all aspects of the Bells' refurbishment.</i>
	The unanswered questions, apart from whether or not the bells are to be retuned or not are :
	What are the proposals for the new hatch? I presume that the original is not in existence so a drawing will be required. Is any other built fabric affected by the route of the bells and is any protection required to eg. historic floor finishes? I would recommend that the Church Architect oversees all the issues relating to the collateral fabric.
	In my experience, bell frames are generally exposed to the elements and I wonder if the Bells Advisor thinks that galvanised fixings are OK; my instinct would be for a suitable stainless steel?"
	The Bells Advisor advises that painted galvanised fixings as described in Whites schedule are standard and although will need attention every ten years or so, should last hundreds of years.
	Please could you contact your church architect, Nick Rank regarding the access hatch? The DAC will consider the CBC and above advice at the next meeting, but the access hatch is really the key point for now
26/01/2022	DAC Advice
To: Peter Ellis From: Katy Purvis	I am writing to let you know that at its meeting of 21 January 2022, the DAC considered the report of the Church Buildings Council regarding their recent visit, and resolved to recommend the proposals for the bells and bellframe, with the following proviso:
	a. The works to be under the direction and subject to the inspection of the Church Architect
	The Committee also wished to offer the following informal advice:

	a. The parish should record the details of how the access hatch is designed and installed and to also share this information with the DAC office to keep on file
	This means that Caroline will now be able to raise the Notification of Advice, which will allow you to generate the public notice
26/02/2022	Further to my recent mail I am attaching the Architects latest proposals for the Bell Chamber Hatch.
To: Katy Purvis From: Peter Ellis	4) Brief Statement of Significance for Ringing Chamber Floor of Buttress6) Drawing number (4)01 Revision A 'Proposed opening to allow for
With attachments	lowering of bells' of Buttress dated January 2022
27/02/2022 To: John Webster, George Colville, Peter Robson, Chris Hughes, John Vickers, Peter Ellis	You have asked me whether Whites Revised Estimate for rehanging the Audlem bells in a repaired frame has sufficient information to consider it for a CBC grant, presumably when the Committee meets on the 6 th April 2022. My personal view is that more information is needed and, since time is short, I have decided to share my thoughts with the parish (for their consideration) and the Chester DAC (who might still be considering this before recommending it to the Chancellor); please see
From: Graham Pledger With attachments	the attached file. You will see that I am recommending a drawn record of the frame, something which CBC has encouraged in the past and funded from a separate survey budget. I have already spoken to Dr John Eisel from Hereford who is prepared to do this; it would be good if he could be commissioned and asked to report if possible in time for the April Meeting.
	You will also see that I am asking for further information from Adrian Dempster, the PCC's Structural Engineer, and asking him to consider an alternative detail for the foundation beam ends. Similarly, I am asking Whites (or the appointed bellhanger) to confirm a particular tie rod detail (which unlike traditional tie rodding won't weaken this particular frame type) and, once they have the record drawings, to mark up the position of all strengthening proposals.
	You will know of course that any grant depends a lot on the listing status of the bells and bellframe. I know that the CBC letter last December considered that both were worthy of listing, but does the PCC/DAC need to be submitting this application now, or has this already been done?
18/03/2022	Extract of the minutes of the DAC meeting of 18/03/2022 Further to Minute 14, 21/01/2022, the Committee noted an adviser from the CBC who had not been involved in their site visit had contacted the parish directly, copying in the Diocesan Secretary and advised them not to carry on with the faculty application until his queries had been addressed. This had happened after the DAC had already received and had due regard for the CBC feedback and had recommended the scheme subject to the parish providing details of the bell chamber

	hatch. It noted the parish had applied for a CBC grant and the CBC grants officer had asked their adviser for comments on the scheme, and the adviser had subsequently contacted the parish directly with comments and copied in the Diocesan Secretary. The comments had included that the faculty process should not be formally concluded. The Chair commented that it was outside of the adviser's remit to tell the parish that the faculty process should not be formally concluded, and the Diocesan Secretary should not have been copied in. It was noted that the DAC office has contacted the CBC to query the nature of this advice from their adviser. The CBC have advised this is being discussed and will reply in due course.
	hatch had now been provided.
	The Committee wished to offer the following informal advice: a. It noted that the CBC had seen fit to offer feedback as part of the faculty application process without the adviser contributing. The DAC had taken full account of the CBC advice and gone on to recommend the scheme subject to advice regarding the hatch door.
	 b. It encouraged the parish to proceed with the display of public notices. If the parish went on to make any changes to the proposals they could be dealt with as a Variation request as it was not expected that any amendments would be problematic for the DAC and probably not of a nature that would require public notices. c. The DAC office should continue its enquiry with the CBC about
	this late advice which was completely out of sync with the faculty process which had been correctly followed by the DAC and parish and had subsequently put the parish and DAC in an awkward position.
20/06/2022	Further to our conversation earlier I am attaching the following documents:-
To: Caroline Hilton From: Peter Ellis	1. Audlem Bell Restoration-Preferred Supplier
With attachments	2. John Taylor revised quotation
	3. Whites of Appleton revised quotation
	Your advice on updating the faculty application would be appreciated.
	7) Audlem Bell Restoration-Preferred Supplier report dated 18 June 2022 Revised preferred quotation and proposals of John Taylor & Co dated 30 May 2022

	Revised quotation of Whites of Appleton Ltd dated 18 May 2022
22/06/2022	Extract of DAC meeting minutes
	Further to Minute 4, 18 March 2022, the Committee considered the
	proposed change of contractor for the work that has already been
	recommended
	The Committee RESOLVED that:
	a. It was content, subject to there being no change to the
	specified works, for the recommendation to stand, and the
	DAC office should liaise with the Registry as to the
	appropriate way of processing this change in the faculty
	application
15/08/2022	Are you in a position to be able to give me an update as to how I should
	proceed with the changed tender details for the Faculty. I am not sure
To: Katy Purvis	of the stage we are up to with the DAC?
From: Peter Ellis	
30/08/2022	I am having difficulty in updating the petition for our Bells project.
	Please can you advise? The Bell ringing team are becoming concerned
To: Katy Purvis	at the delay.
From: Peter Ellis	
06/09/2022	I've amended the notification of advice now,so this should be Ok for you
	to complete
To: Peter Ellis	
From: Katy Purvis	
07/09/2022	Unfortunately there are still a couple of items which need changing on
	the Petition Form:-
To: Katy Purvis	
From: Peter Ellis	All in Accordance with:-
	should read
	Ward Cole report date should be 27/4 /22 not 24/4/21
	Quotation date should be 18/7/22 not 30 May 22
26/09/2022	You may not have seen this revised sketch of the Bell frame to be read
	in conjunction with the Ward Cole report
To: Katy Purvis	
From: Peter Ellis	8) Drawings numbered SK04 and Sk05 of Ward Cole Consulting
	Engineers both dated 27 April 2022
With attachment	
26/09/2022	I think I now have all the information to complete the Faculty. Please
	can you advise me as to where we are up to with the amendments?
To: Katy Purvis	
From: Peter Ellis	
26/09/2022	I think I now have all the information to complete the Faculty. Please
	can you advise me as to where we are up to with the amendments?
To: Peter Ellis	
From: Katy Purvis	
26/09/2022	Hi Peter, I am waiting for you to send the latest report/quotation, as I
	need to amend the notification of advice. The last set of documents you
To: Peter Ellis	sent over were not the most recent, which we haven't seen yet.
From: Katy Purvis	

26/09/2022	My apologies I thought I had sent you these
To: Katy Purvis	
From: Peter Ellis	Audlem Bell Restoration – Preferred Supplier (already received 20/06/2022)
With	Superseded - Revised Specification and Quotation of John Taylor & Co dated
attachments	8 July 2022
13/10/2022	I apologise for the delay in responding. Please find attached our decision letter.
To: John Vickers	
From: John Webster of CBC	Contents of CBC grant decision letter dated 13 October 2022:
	Audlem, St James the Great (Diocese of Chester)
	Conservation of bells and bell frame.
	Thank you for forwarding John Taylor & Co's proposals for the work to
	the bells and bell frame dated 30t ^h May 2022.
	When the Council gave its advice in December 2021, it welcomed the retention of the timber frame and stated that full details of the
	proposals should accompany the faculty petition. This advice was given
	on the basis of the Ward Cole report which recommended repairs which
	it was understood would not overly impact on the character of the
	timber frame in the tower. Details of the repair were not available to the
	Council at that time. As the proposals have been developed by your
	chosen bell hanger the amount of metal work specified to secure the frame has increased, to the extent that the historic character of the
	timber bell frame would be lost. Keeping its character is an important
	outcome of the advice that it was retained in use in the tower. If a repair
	that perpetuates the historic character of the bell frame is unrealistic,
	then the reason for its retention is undermined. Therefore, if a repair
	using traditional carpentry skills is not possible the Council would not
	continue to advise in favour of the restoration of the frame.
	When the Bells Committee of the Church Buildings Council met in April 2022, it noted that significant doubts had been raised about the
	possibility of producing strengthening proposals that would enable the
	bellframe to perform to an acceptable standard for the foreseeable
	future. Unfortunately, the current proposals do not address these
	concerns.
	The Council is unable to grant aid this project while it has doubts over
	the proposals for the bell frame. Given the significance of the bells it hopes that a way forward can be found either by replacing the current
	frame or with traditional repairs of the current frame.
14/10/2023	Our Bell Ringing team are asking-Does the attached letter, just received,
	change the views of the DAC?
To: Katy Purvis	
From: Peter Ellis 21/10/2022	Iohn Vickers has asked that I cond you the two attachments giving his
21/10/2022	John Vickers has asked that I send you the two attachments, giving his any my views of the situation before our tech committee meeting this
To: Katy Purvis	morning.
10.10019101915	

France Chris	Munanta in the final years includes the response that Vel live to encounts
From: Chris	My note, in the final para, includes the message that I'd like to convey to
Hughes	the DAC.
With	9) Audlem Frame – a Non-Technical View
attachments	
	9) Audlem Frame – CDH Thoughts 20/10/2022
24/10/2022	The DAC were very sympathetic to your views on Friday, we will see if
Tay Chuis Llushaa	we can get to the bottom of the CBC advice and work from there
To: Chris Hughes	
From: Katy Purvis	
24/10/2022	Thanks for the information, Katy. Really good news that the DAC had
	time to consider the Audlem bell restoration.
To: Katy Purvis	John Vickers tells me that you're trying to 'unpick' the state of things, and
From: Chris	suggests I send you the attached timeline, which shows the entire
Hughes	history starting just three years ago. I produced it to give myself a
	clearer view of the whole story, with its conflicting advice from different
	technical experts, and different bell hangers. I hope you find it useful,
	too.
	10) ABRA Timeline
25/10/2022	Thanks Chris, this is great, and matches my understanding of events. I
	did try to speak to John Webster yesterday and left a message. I will try
To: Chris Hughes	again today. I have finally managed to go through the July quotation
From: Katy Purvis	from Taylors and picked out what was different from the quotation that
	the DAC recommended in June.
	Unfortunately I wasn't at the June meeting, and the revised quote was
	looked at as an extra item, similarly to this month with the CBC letter, so
	it was not clear at the time how much that Taylors quote differed from
	the previously recommended Whites quote. The June recommendation
	was subject to it being broadly the same, so I may need to look again at
	the differences between the latest quote and the first
25/10/2022	I may have something that will tell you about differences between the
	Taylor's and Whites quotes. I don't have time this morning, but will look
To: Chris Hughes	into it later in the day.
From: Katy Purvis	
27/10/2022	DAC Advice
	I am writing to let you that at its meeting of 21 October 2022, the DAC
To: Peter Ellis,	considered the response of the CBC to the grant application and
Chris Hughes	resolved to request that the DAC office establish a timeline of events
From: Katy Purvis	and write to the CBC with a form of words to set out the following
	points:
	1. A timeline of correspondence and events relating to the CBC
	involvement and DAC consideration of this matter
	2. The parish had revised its proposals in line with someone's
	advice apparently speaking on the CBC's behalf but the CBC is
	now rejecting the scheme and this is obviously causing
	problems for the parish.
	3. The DAC was therefore seeking clarification from the CBC.

	 4. It also considered the delay of 6 months between the bells committee decision and advising the parish and DAC to be unacceptable Thanks to the helpful information you have provided over the last week or so, we should be able to progress this reasonably promptly, although I cannot promise it will be actioned immediately. If you have any queries please let me know
17/11/2022 To: Katy Purvis From: Chris Hughes	Can you tell me when the DAC meeting is this month? I guess there may be some more discussion of the Audlem bell restoration - particularly if the resolution below has made any progress. If there's any way we can help move things on, please do let me know (John V is away for a few days, so I'm writing in his place).
17/11/2022 To: Chris Hughes From: Katy Purvis	It is tomorrow, but Audlem isn't on the agenda. I'm afraid it has been a very hectic few weeks and I haven't been able to progress the action required of me yet. However it is the next item on my to do list, so I can hopefully start it tomorrow morning before DAC if possible
21/11/2022 To: Katy Purvis From: Chris Hughes	Thank you for your phone call this morning, and for all you're doing to move things forward. We are mailing Taylors to ask them to show the proposed metalwork on a copy of the Eisel frame diagrams, so that the CBC can assess the solution. We're also asking Taylors about their availability for a meeting at Audlem. I have contacted Adrian Dempster, who says he'd currently be available for a meeting on 7, 9, 16, 20 or 21 December. He warns me that his diary fills up quickly! I am copying this mail to John Webster, so that he can see those dates too.
21/11/2022 To: Chris Hughes, Katy Purvis From: John Webster of CBC	The 16th and 21st are possibilities. I will confirm later in the week.
30/11/2022 To: Katy Purvis, John Vickers, John Webster of CBC From: Chris Hughes With attachment	Following recent emails and phone calls, we asked Taylors to provide versions of the John Eisel frame diagrams, marked up with their proposed steelwork. I attach a copy of these. You will see that the solution has steel cleats at the corners of the frame pits and anchoring the base sills to the foundation beams; and tie rods between the top and bottom sills of the frame. Taylors have said "it could be that an abundance of vertical tie rods might not be needed, but this will not be known until the frame has been seen with all of the bells ringing". In addition to the cleats and tie rods, of course, there will be brackets supporting the main beams in the clock chamber, as agreed between Adrian Dempster and Graham Pledger. So far as we can see, the whole solution is consistent with Adrian Dempster's

30/12/2022	I have no adverse comments to make on Simon's proposals.
With attachment	
To: Katy Purvis, John Vickers, Chris Hughes, Adrian Dempster of Ward of Cole From: Simon Adams of John Tayor & Co	05 showing the beam end support details which I agreed with Graham Pledger. Can someone ensure that John Arthur is sent a copy please? Please let me know if you have any queries or require any more information. Drawings numbered SK04 and SK05 of Ward Cole Consulting Engineers both dated 27 April 2022 (already received 26 September 2022)
From: Claire Smith of CBC 28/12/2022	<i>Guidance documents re Statements of Significance</i> Further to our meeting last week, I have attached my sheets SK/04 and
22/12/2022 To: Katy Purvis	Many thanks for meeting us at Audlem yesterday. Please find attached documents from John on statements of significance. I appreciate you offering to help the parish with this.
16/12/2022	 Excerpt of the minutes of the DAC meeting of 16/12/2022 Further to Minute 15, 21/10/2022 the Committee noted the DAC office had been in contact with the CBC, and that a meeting with the CBC at the church is planned for 21 December. a. The Committee awaited the outcome of the forthcoming meeting with the CBC at the church
09/12/2022 To: Katy Purvis, John Vickers, Chris Hughes From: Claire Smith of CBC	Myself and John Arthur from the Church Buildings Council's bells committee will be able to attend this site visit on Wednesday 21 st December. Would 11am – 1pm suit others for the meeting time? John and I will both be travelling from York to Crewe, and sharing a taxi from there so that time works with trains (if, of course, they are running smoothly).
	 main beams. In fact, Taylors have not found it necessary to use steel cross bracing and plates. I hope you find this helpful. Please let me know if you have any questions. Superseded marked up J Eisel frame diagrams (stamped John Taylor & Co) dated 28 November 2022
	recommendations in section 4 of his report. Further, Taylors have said "All of the above works are standard timber frame reinforcing practice". Taylors report (16 July 2020 and 8 July 2022) provided a list of steel strengthening items that might be used, "such as" corner cleats, cross bracing, plates to fit on the sills and braces, tie bars, and support for the

To: Simon Adams	
of Taylor & Co,	
John Vickers, Chris	
Hughes	
From: Adrian	
Dempster of Ward	
Cole	
30/12/2022	Following on from the site meeting and bellframe testing and
	measurements taken on 21 st December, and the agreed plan to adjust
To: John Vickers,	and refine the method of frame strengthening works, please find
Chris Hughes, Katy	attached our revised specifications formed to concur with the way
Purvis, Claire	forward.
Smith of CBC	
From: Simon	
Adams of John	11) Revised Specification & Quotation of John Taylor & Co dated 30
-	
Taylor & Co	December 2022
With attachment	
03/01/2023	For the avoidance of any doubt, please can you send the latest set of
	your drawings of the bell frame strengthening proposals and the latest
To: Simon Adams	Buttress drawing for the hatch?
of John Taylor &	
Co	
From: Katy Purvis	
i i oni. Racy i ai vis	
04/01/2023	Thanks for this, and for doing it so quickly.
04/01/2023	Thanks for this, and for doing it so quickly. The technical proposal looks good to me.
04/01/2023 To: Simon Adams	
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Energy Circler	
From: Simon Adams of John Taylor & Co	Drawing number (4)01 Revision A 'Proposed opening to allow for lowering of bells' of Buttress dated January 2022 (already received 26 February 2022)
With attachments	Marked up J Eisel frame diagrams (stamped John Taylor & Co) dated 28 November 2022 (already received 30 November 2022)
13/01/2023	Excerpt from the meeting of the DAC of 13/01/2023 Further to Minute 7, 16/12/2022 the Committee considered the informal report of the Assistant to the DAC Secretary following the meeting with officers of the CBC at the church. It was noted that the CBC bells expert on the visit gave no indication as to whether they were supportive or not and the CBC report was still awaited (delayed due to sickness). It was noted that during the visit the CBC also asked for the Statement of Significance to be updated to reflect the significance of the bell frame. This has been carried out, but it was noted that it was only last year that the bellframe was first considered of particular significance (and the works had previously been recommended with the original Statement of Significance).
	It was noted that when the bells were rung during the visit the tower had moved. The Bells Adviser explained how bell towers are designed to flex and move when the bells are being rung, but the frame should not move. He explained that if the frame moves it acts as a hammer and damages the tower. He noted that in this case it sounds like the frame is flexing, meaning the bearings will no longer be aligned; this creates difficulties in ringing and eventually damage to the strike. He noted this is a difficult case; adding that the wood needs to be preserved, eg by putting a frame underneath (however there is not room to do this in this church tower). He noted he had not seen wood used to support wood (as requested by the CBC), and steel (which more normally be used) acts like a 'cast for an arm'. It was commented that to help the parish obtain the grant they need to be able to carry out the work, the CBC bells committee would need to be persuaded to support the scheme.
	The Committee <u>RESOLVED</u> to offer the following informal advice: a. It noted the site meeting had taken place and awaited the report from the CBC
16/01/2023	Thanks Simon, these are the same versions as ours, I was just worried that we might have had earlier revisions, thanks for confirming that we
To: Simon Adams of John Taylor & Co	all have the latest version
From: Katy Purvis	
16/01/2023	Thanks for your reply. Did the revised application for faculty get heard at the meeting on Friday?
To: Katy Purvis	

From: Simon	
Adams of John	
Taylor & Co	
14/02/2023	Thanks for the draft SoS. I've been through all the bell bits, and put
	comments in RED ink. John V doesn't have any more to add, so l attach
To: Katy Purvis	my version. Please contact me if you have any questions on what I've
From: Chris	suggested.
Hughes	
	3) Updated Statement of Significance
With attachment	
20/02/2023	Sorry to trouble you again, but things are still going on with the CBC.
To: Adrian Dempster of Ward Cole, John Vickers From: Chris	They have sent a letter to the diocese, asking for further clarification of tie rod positioning etc - which we are discussion with Taylors. They also say:
Hughes	The Council asks for clarity on the expected frame performance (for example, the planned maximum movement), and who is taking responsibility for achieving it.
	Responding to this, Simon (for Taylors) has said
	We expect that the overall horizontal movement of the bellframe will be reduced by 50% after strengthening, and we will take responsibility for that. What we cannot be responsible for is the expected movement in the base cills – that comes within Adrian Dempster's designs, and should be immeasurable after completion of works.
	Can you make a similar statement about responsibility for the effectiveness of base cill brackets conforming to the design that you agreed with Graham Pledger? We will then be able to send both Taylors' and your statement to the CBC, and thus get over one more of their hurdles.
20/02/2023	Provided that the brackets shown on the attached sheets SK_04 and 05
	are fabricated and fixed in accordance with our details, I wouldn't
To: Chris Hughes	expect there to be any differential movement between the ends of the
From: Adrian	foundation beams and the tower walls.
Dempster of Ward	I trust that this is clear, but please let me know if you have any further
Cole	queries.
01/03/2023	DAC Advice
To: John Vickers From: Caroline Hilton	I am writing to let you know that at its meeting of 17 February 2023 the DAC considered the letter from the Church Buildings Council following their visit to the church, and the Committee wished to offer the following informal advice:
1	

	 It encouraged the parish to provide the further details specifying the works to the bell frame as set out by the Church Buildings Council in its response of 24 January 2023
	If you have any queries please do let me know.
01/03/2023 To: Caroline Hilton From: Chris Hughes	Thank you for that. On 22 February I sent mail to Katy, giving the required information, so that the DAC could forward it to CBC. I will forward the mail to you too in a moment.
01/03/2023	Forwarded mail, as promised.
To: Caroline Hilton From: Chris Hughes	Email of 22/02/2023 to Katy Purvis: Thank you for your email of 8 February, attaching the CBC (Claire Smith) advice letter (dated 24 January) following their visit to Audlem before Christmas.
With attachments	We believe that the main points from the CBC letter which required a response are:
	 "The Council asks for clarity on the expected frame performance (for example, the planned maximum movement), and who is taking responsibility for achieving it." "The Council seeks further clarification of the proposed strengthening works to the bell frame a more substantive description of the proposed works, or the proposed works need to be shown on the drawings." I have contacted both Taylors (Simon Adams) and Ward Cole (Adrian Dempster) about these points. I attach :
	 A set of drawings from Taylors, based on those by John Eisel, showing all the proposed frame strengthening, with both plan and horizontal (truss) views. A letter from Taylors giving further description of the strengthening, including the head and base cill cleats, any tie rods that are needed to further reduce frame movement (up to the number shown on the drawings), and tightening of the existing steel plates. The letter also states Taylors' target improvement in the horizontal frame movement, and their responsibility for achieving it. An email from Ward Cole (Adrian Dempster) stating their responsibility for the performance of the brackets that will support the main beams, providing they conform to the Ward Cole specification; both the existing Taylors proposal and the attached letter say Taylors will provide and fit brackets that conform to that specification. (The Ward Cole email references diagrams SK_04 and 05 dated 27/04/22, which the CBC and DAC already have.)

	 I hope you agree that this is an adequate response to the CBC's letter, and that you will forward it to the CBC as soon as possible so that we can, at last, progress! 12) Marked up revised frame drawings (J Eisel) stamped John Taylor & Co dated 28 November 2022, revised 17 February 2023 and further frame drawings 13) Letter of John Taylor & Co dated 21 February 2023 – detailing frame strengthening works proposed <i>Email of Adrian Dempster of Ward Cole to Chris Hughes dated 20/02/2023 (see included above)</i>
07/03/2023	Thank you for your telephone call yesterday which has further
To: Caroline Hilton From: John Vickers	emphasised to me the fact that time pressures are becoming critical in respect of our project. The two main areas affected are one, the expiry of time limited grants, and two, the expiry of Taylor's fixed price contract. The first I will have to deal with myself, but the second requires your help please. This because the fixed price guarantee expires at the beginning of May, and even if a conservative inflationary price rise of ten percent was applied, this would mean having to find another four thousand pounds of funding at least. This would be a huge problem for us.
	I have spoken to the sales director at Taylor's, Simon Adams, this evening and he has offered the following possible solution. If we are able to sign a letter of intent offering a contract subject to a faculty being obtained, he is willing to stand by his latest price. This would also have the added benefits that he would be able to put our project to the front of the queue, and he would also be able to give us a start date for the work. Also there would be no monies payable on signing the letter, only when work started.
	My question for you now please is; does a mechanism exist by which we can get this done? And if so, can this be discussed at the DAC meeting next week?
	Thank you for your time and consideration in this matter,
08/03/2023	Thank you for your message, I'll look into the possibility of a letter of intent and can definitely include this request for discussion by the DAC
To: John Vickers From: Caroline Hilton	next week. I will keep you updated.
08/03/2023	As requested Caroline
To: Caroline Hilton From: John Vickers With attachment	Drawings numbered SK04 and SK05 of Ward Cole Consulting Engineers both dated 27 April 2022 (already received 26 September 2022)

08/03/2023 To: John Vickers	Many thanks, I have now sent this along with the response/details sent by Chris on 22/02 on to CBC.
From: Caroline Hilton	
18/03/2023	Extract from the minutes of the DAC meeting of 17 March 2023 Further to Minute 10, 17/02/2023, the Committee noted the further details provided by the parish in response to the latest CBC feedback, that have now been forwarded on to the CBC. It was noted that the details had been favourably reviewed by the Bells Adviser. The Committee <u>NOTED</u> the further details had been sent to the CBC and awaited their feedback.
19/05/2023	 Extract from the minutes of the DAC meeting of 19 May 2023 Further to Minute 17/03/2023, the Committee RESOLVED to recommend the scheme [for the purpose of the Measure, the works are unlikely to result in a material effect] with the following proviso: a) The works to the bell frame to be under the direction and subject to the inspection of the Church Architect

Audlem St James – Bells -	Consultation with	Church Buildings Coun	cil
Addient Sejunies Dens	consultation with	charch banangs coan	CII

Date	Message
28/06/2021	The following consultees have been invited to view the following
20/00/2021	с
	Application on the Online Faculty System by Katy Purvis:
To: CBC	
From: Katy Purvis	Reference 2020-056061 concerning Audlem: St James the Great (Church
	Code 609325).
	 <u>consultchurchbuildingscouncil@churchofengland.org</u>
	Dear Consultee
	FOA Church Buildings Council
	Ŭ
	Audlem St James (Grade 1 / 14C / 1856) Bells and bell frame
	refurbishment
	reidibisiinient
	You have been invited under part 4.5 of The Faculty Jurisdiction
	(Amendment) Rules 2019 to consult on the above Faculty Application. A
	response to the consultation will be taken into account if it is received
	within 42 days of the date of this email.
	The deadline for your response is 09/08/2021
	The proposals are for full refurbishment of the bells and strengthening
	of the 1734 bell frame, which was initially to be replaced. A recent
	structural engineers report has indicated that it can and should be
	repaired, so this is now the preferred option.
14/07/2021	I sent this application for formal consultation on 28 June 2021, as below.
	I was just checking the OFS to see if there had been any online
To: Abu Pasha of	response, and it tells me there are no invited consultees. The email
СВС	below is logged in the messages tab. The parish are expecting the
From: Katy Purvis	consultation period to end on 9 August, so please can you investigate as
	to whether the invitation has been sent?
14/07/2021	Looking at the case history, the invitation for formal consultation was
17/0//2021	
Tot Koty Durada	sent before the case was moved into the formal consultation stage.
To: Katy Purvis	Whilst the email has the wording, which was manually written, the invite
From: James Miles	was not included in the list of formally consulted bodies, as the "Formal
of CBC	Consultation Invite" button was not used.
	Having checked our casework system, the case is logged as a formal
	request, and a response will be given by the 9 th August.
09/08/2021	We referred this case to you via the OFS back in June, however there
	was a slight mixup, and I am not sure you received it. I queried this with
To: David Knight,	James Miles as attached and he assured me that it was logged as a
Keri Dearmer of	formal request. Please could you let me know if you wish to comment
CBC	on the proposals, as attached?
From: Katy Purvis	
18/08/2021	I'm sorry for resending this, I am aware that one or both of you may be
	away. Our original deadline for a response was 9 th August. This matter is
	due to be discussed at the DAC standing committee meeting on
	and to be discussed at the DAC standing committee meeting on

	The sector sector sector is the sector sector is the sector sector is the sector sector is the sector is the sector sector is the sector secto
To: David Knight,	Tuesday next week. It has been supported by the DAC and is due to be
Keri Dearmer of	recommended subject to your comments, so it would be very helpful to
CBC	know if a response is on its way before then.
From: Katy Purvis	
18/08/2021	Thank you for your email.
	Jacinta is looking at this case, hopefully she can give you an update on
To: Katy Purvis	timescales.
From: Keri	
Dearmer of CBC	
18/08/2021	I apologise for the delay in responding. This case is not straightforward,
	so I am getting advice from two bells committee members. We may
To: Katy Purvis	also wish to visit the church to see the bells and frame. How urgently
From: Jacinta	do the parish need a response?
Fisher of CBC	
18/08/2021	Thanks for letting me know, the parish don't mind waiting, it's not
	desperate, if a visit and further consideration is necessary, that's fine, I
To: Jacinta Fisher	will report that to the committee.
of CBC	
From: Katy Purvis	I think we thought the DAC had ironed out the complicated bits to their
TTOIN. Raty Fulvis	
	satisfaction, so were expecting a positive response from yourselves. We
	may have underestimated the issues, so it's especially useful to have
	your expert opinion and we can wait as long as needed.
21/10/2021	Please could I ask if there is any progress on this case, the parish have
	asked me for an update this week?
To: Jacinta Fisher	
of CBC	
From: Katy Purvis	
07/11/2021	I sincerely apologise for this delay. I am working on it and will get back
	to you asap.
To: Katy Purvis	
From: Jacinta	
Fisher of CBC	
09/11/2021	Thanks Jacinta, look forward to hearing from you
To: Jacinta Fisher	
of CBC	
From: Katy Purvis	
12/11/2021	I have been looking into the proposal for bell tuning at Audlem, St James
	and I think it would be best if the Council could visit the parish to chat to
To: Katy Purvis	them and to view the bells. Who should I contact to arrange this?
From: Jacinta	and the very the bens. Who should reonauct to arrange this:
Fisher of CBC	
15/11/2021	Thanks for your email, please could you contact Peter Ellis,
15/11/2021	
Toulociato Fisher	Churchwarden, I'm sure he will be happy to help
To: Jacinta Fisher	
of CBC	
From: Katy Purvis	
17/12/2021	l attach the Council's advice regarding the bells at Audlem, St James.
	l apologise for the delay in responding.

To: Katy Purvis	
From: Jacinta	Letter as below
Fisher of CBC	
With attachment	
17/12/2021	Thank you for seeking the Church Buildings Council's advice over the
	proposed works to the bells at the above church. This was considered
To: Katy Purvis	under the Council's delegated advice policy, following a visit to the
From: Jacinta	church on 8 December and its advice is set out below.
Fisher of CBC	
	The church has a complete ring of 6 bells by Abel Rudhall dating from 1736, three of which are maiden bells. The bells were originally cast with loop canons, but these were all removed in 1891 by Taylors during a refurbishment of the bells and fittings. The Council noted that three of the bells have been tuned at some point, although they have never been machine tuned. They hang on a frame that is either of the same date, or substantially of this date incorporating older elements. As 1736 was the first year that Abel Rudhall traded, the complete 1736 Audlem ring and coeval timber frame are of high significance as work from a particular early stage in the work of this founder. Although Rudhall's work is well-represented in Gloucestershire and adjacent counties, it is rare in Cheshire. Although the bells and frame are worthy of listing due
	to their age and completeness. This is a significant ring. The Council enjoyed its visit to hear the bells being rung out on a clear December morning and is grateful to the Audlem ringers for arranging to meet and to ring. Following the discussion during the visit, the Council understands that the bell ringers are relatively content with the historic sound of the bells and that they are more concerned with replacing the bell wheels and other fixtures, thus making the bells safer and easier to ring.
	It is proposed to tune the bells. Since the bells are of one date and show no signs of modern tuning, and three are tonally as cast by Rudhall, the bells are tonally significant as the early work of their founder and, although not proven, extremely likely to be tonally as installed in 1736. There is no reason not to consider that the tuning was applied soon after the bells were cast. The Council would strongly advise against their tuning on account of tonal significance. It also does not consider that the statement of needs made a strong enough case to justify tuning. Nothing about the sound of the bells suggests that there is a strong case for tuning.
	The Council notes that it is proposed to retain the frame. Given its significance and taking into account the engineering advice received by the PCC it considers that this is the appropriate course of action. It would ask that full details of the proposed works to the frame are set out clearly and submitted with the faculty petition. The Council would not be content with any proposals that saw the frame removed.

	Of the works proposed, the Council is content to defer further consideration of the matters relating to the frame, replacement bell fixtures and associated repairs to the DAC, unless its advice is specifically needed on the frame.
	I hope that this advice is helpful.
17/12/2021 To: Jacinta Fisher of CBC From: Katy Purvis	Thanks very much Jacinta, I have been looking forward to seeing your advice, particularly on the bell frame. We will take this back to the DAC in January.
11/01/2023 To: Katy Purvis From: Claire Smith of CBC	I just wanted to let you know that due to illness, we are delayed in composing the response letter for Audlem. Sorry that this is a further delay for yourself and the parish. I hope to be able to get back to you in the next couple of weeks. I'm really sorry that this has happened, especially on a case where there has already been delay, but I just wanted to keep you informed so you know it is still in progress.
12/01/2023 To: Claire Smith of CBC From: Katy Purvis	Thanks Claire, sorry to hear of the illness issue, hope whoever is affected feels better soon. I have been trying to contact Taylors to ensure we all have the latest revisions of the marked up drawings for the bell frame strengthening, but with no success so far, I will send those to you as soon as I receive them. I have revised the SoS on behalf of the parish, but omitted information from Dr Eisel's report, so I need to do some additional work on this before I send it to you. I must stress that I haven't put a great deal of effort into this task, as I mentioned on site, the parish were not aware of the significance of the bells or bell frame at the outset of their application, and while I agree that going forward, future Statements of significance should be further developed to reflect the significance of these items, at this late stage it is a lower priority. Right now, it seems an unnecessary extra burden on the parish, who have complied with all requests for further and unanticipated investigation so far, sometimes at cost. It is also the case that although the churchwarden originally prepared the documents for the initial application, as the technical aspects became more controversial, the bell ringers have taken the lead, and they are considerably less experienced in matters of faculty jurisdiction, so in this instance, I have drawn the basic information together for now and will assist the parish in making better use of it in future We have a DAC meeting tomorrow, this case is on the agenda and the committee will be updated with my report of your visit, so I appreciate you letting us know of the delay.

12/01/2023	Thank you for liaising with Taylors; we look forward to receiving the drawings.
To: Katy Purvis	
From: Claire Smith	Thank you also for stepping in to help the parish with the statement of
of CBC	significance, and I agree with your approach.
15/01/2023	You have previously asked me to keep you appraised of the CBC
	engendered costs to our project. I am writing today to inform you of the
To: John Webster	position to date. The costs incurred so far are itemized below, and you
of CBC, Katy	will see that they amount to a significant proportion of our fund.
Purvis, Claire	
Smith of CBC.	26.3.22 Report recording the bell frame from J.
Chris Hughes	Eisel: £1294.72
From: John Vickers	31.3.22 CBC grant towards above report
FIOIII. JOIIII VICKEIS	: -£600.00
	09.5.22 Ward Cole invoice for revised brackets as specified by G.
	Pledger: £306.00
	21.12.22 Ward Cole invoice for site visit with
	CBC: £903.12
	<u>Total: £1903.84</u>
	If you require any further information please do not besitate to contact
	If you require any further information, please do not hesitate to contact
	me,
30/01/2023	As you'll recall, on 4 January I sent mail to Simon Adams at Taylors,
50/01/2025	
Tat Kata Durada	pointing out that their proposal for the Audlem bells had an
To: Katy Purvis,	inconsistency in the pricing: certain items were included in both
John Vickers,	Quotation 1.0 and in Appended items 1.7 and 1.8. Simon has now sent
Claire Smith of	a new version of the proposal which clarifies this: the items are now
CBC, John Webster	excluded from Quotation 1.0. I emphasise that this neither changes the
of CBC	work to be done, nor the costing; it is merely a clarification.
From: Chris	l attach the updated Taylors proposal, and am copying this mail to John
Hughes	Webster and Claire Smith for CBC.
	Revised Quotation and Specification of John Taylor & Co dated 27
	January 2023
30/01/2023	Thank you Chris. That is received, understood and added to our files.
To: Chris Hughes	
0	
From: Claire Smith	
of CBC	
06/02/2023	l am very sorry for the delay in getting this to you. Please find attached
00/02/2023	the Church Buildings Council's letter regarding the proposals for the bell
To: Katy Pupyic	frame and bell fittings at Audlem, St James the Great.
To: Katy Purvis	n'ame and ben numes at Audiem, st James the Great.
From: Claire Smith	Attached lattar datad 24/01/2022;
of CBC	Attached letter dated 24/01/2023:
	Audlem St James the Great (Diacosa of Chaster) Branasad new
	Audlem, St James the Great (Diocese of Chester) Proposed new
	fittings for the bells and strengthening of the bell frame

The Council would like to thank the parish for welcoming myself and John Arthur, Bells Committee member, to the church on 21 December 2022. The Council acknowledges that this case has been long-running. Thank you for your patience in awaiting the return of the Council's advice; confirmation of the most recent drawings was received on 13 January 2023. This advice is given under the Council's delegated advice policy, guided by members of the specialist Bells Committee.
The opportunity to examine the bell frame at the site visit was very welcome, and has informed the advice given here. The Council understands that the significance of the bells and bell frame has only come to be understood during the development of the proposals, and is pleased the parish has amended the proposals in response. The Council is aware that the diocese is supporting the parish to update the statements of significance as part of the proposals and to provide a record of the bells and frame.
It is important that, if faculty is granted for the scheme and it is enacted, the parish would be satisfied with the result of the repair work. The Council asks for clarity on the expected frame performance (for example, the planned maximum movement), and who is taking responsibility for achieving it. The Council encourages designs where the timber frame, rather than metalwork, bears the primary load.
Frame When the bells are rung, inspection showed movement in the frame head of between 1-3mm in both directions. There was not so much noticeable vertical movement and the whole frame seemed to move in a uniform manner without evidence of flexing. The two base beams moved in their sockets. A design has been developed to secure the base beams whilst allowing air to circulate around the beam ends: the four ends should be treated in a similar manner.
The Council seeks further clarification of the proposed strengthening works to the bell frame. In the revised specification of 30th December 2022, the section titled, 'bell frame strengthening items' needs a more substantive description of the proposed works, or the proposed works need to be shown on the drawings. For example, there are several truss designs for the bell pits but there is not a full set of proposed drawings for them all. Some truss designs have more limited opportunity for fitting tie rods which do not distort the frame; it is unclear from the documents provided how tie rods might be used, and where they are considered suitable.
The frame heads are currently jointed and held in place by substantial flat wrought iron flat brackets secured by through bolts with nuts underneath. They should be tightened on a regular basis, perhaps as part of an annual frame tightening. It may be prudent to re-enforce these joints. Similar strengthening could be considered at the same intersections of the sill timbers. Again, details of proposals for

	1
	strengthening should be clear from the documents supporting the faculty.
	Fittings The Council is supportive of the new fittings for the bells, namely new headstocks, wheels, and refurbished clappers. These works will bring the installation up to a modern standard. Inspection raised a few points
	to note: • Some of the headstocks are showing signs of fatigue around the junction with the crowns of the bell where the headstock has been carved to suit the bell; this similarly applies to some of the gudgeon plates
	 One outer bell bolt was loose when touched The housings for bearings can be reused, but on at least one bearing grease was detected on the outside, meaning either the seal is failing or the gudgeon pins have moved out of line
	• Regarding the wheels, the nails holding the shrouding have corroded heads. Nails between the soling and the shrouding may also be corroded.
	 A piece of metal screw is standing proud near a garter hole on a wheel which may wear the bell ropes New staples and staple bolts for the headstocks will be needed
	The Council agrees with the proposed structural works to the base beam ends, and is supportive of the proposed works for new fittings to the bells. In its letter of 17 December 2021, the Council requested that full details of the proposed works to the frame were set out clearly and submitted with the faculty petition. This is still needed and could be achieved by more certainty and a fuller description in the specification, or by providing extra drawings. It is hoped that the Council will be able to support the proposals once the details for strengthening the frame have been submitted.
	The Council defers to the diocese regarding the details of the removal and reinstatement of the stair, and the creation of a trapdoor in the ringing chamber floor. The Council defers to the DAC's clock adviser for works to the clock and to advise on its protection during the works to the bells.
	I hope this advice is helpful.
08/03/2023 To: Claire Smith of CBC From: Caroline Hilton	Thank you for your email of 6 February with the attached CBC feedback letter. I have picked up this matter while Katy is away for the time being. Further to your letter dated 24 January 2023, the parish have provided a response in answer to the points raised and the extra information that was requested, please see their response below and details attached:
	We believe that the main points from the CBC letter which required a response are:

	 "The Council asks for clarity on the expected frame performance (for example, the planned maximum movement), and who is taking responsibility for achieving it." "The Council seeks further clarification of the proposed strengthening works to the bell frame a more substantive description of the proposed works, or the proposed works need to be shown on the drawings." I have contacted both Taylors (Simon Adams) and Ward Cole (Adrian Dempster) about these points. I attach : A set of drawings from Taylors, based on those by John Eisel, showing all the proposed frame strengthening, with both plan and horizontal (truss) views. A letter from Taylors giving further description of the strengthening, including the head and base cill cleats, any tie rods that are needed to further reduce frame movement (up to the number shown on the drawings), and tightening of the existing steel plates. The letter also states Taylors' target improvement in the horizontal frame movement, and their responsibility for achieving it. An email from Ward Cole (Adrian Dempster) stating their responsibility for the performance of the brackets that will support the main beams, providing they conform to the Ward Cole specification; both the existing Taylors proposal and the attached letter say Taylors will provide and fit brackets that conform to that specification. (The Ward Cole email references diagrams SK_04 and 05 dated 27/04/22, which the CBC and DAC already have.)
	We look forward to hearing from you and hope that the details provided are found to be satisfactory in order for this matter to be progressed for the parish.
	12) Marked up revised frame drawings stamped John Taylor & Co dated17 February 2023 and further frame drawings
	13) Letter of John Taylor & Co dated 21 February 2023 – detailing frame strengthening works proposed
	Email of Adrian Dempster of Ward Cole dated 20 February 2023 (included in Corresondence index)
29/03/2023 To: Caroline Hilton From: Claire Smith of CBC	Thank you for your email passing on the additional documents from the parish. This advice is given under the Council's delegated advice policy, with input from members of the Council's specialist bells sub- committee.
	The Council thanks the parish and its advisers for providing the requested information. The extra documents add much detail to the

proposals, and the Council now feels the application is ready to progress.
The Council welcomes the full set of frame drawings which show the extent of the proposed work.
The Council notes that the size and number of tie bars to be used will be determined on site (letter, John Taylor & Co, 21 February 2023), and encourages the use of the least invasive approach to achieve the desired result.
I hope this advice is welcome news for the parish.