

Tender Report for Bell repairs and rehangings

1. Introduction

1.1. On 3 December 2024, tenders were issued to:

- Matthew Higby & Company Ltd
- Nicholson Engineering
- John Taylor and Co Ltd

All three companies are experienced Bell Hangers with Higby and Nicholson being West Country based.

2. The Tender Process

2.1. The Tender Return Due Date was noon on Friday 11 January 2024. However, with only one tender received by this date (Nicholson), the tender was extended, and three tenders were received by Friday 24 January.

2.2. A summary of the tenders received was as follows:

Matthew Higby & Company Ltd	£46,635.00
Nicholson Engineering	£61,086.00
John Taylor and Co Ltd	£66,150.00

NB The above figures exclude VAT.

3. Tenders Analysis

3.1. All the Contractors were provided an outline brief as to the extent of the works and all have subsequently used their knowledge of the bells and bell-frame to describe the proposed works and to provide a quotation to undertake the works.

3.2. All the tenderers proposed to remove all of the bells from the tower to their workshops for repairs, modifications and cleaning.

3.3. Nicholson are including a hot dipped galvanised lifting beam within their proposal which would be left in place upon completion of the works. The other bell-hangers are providing temporary beams.

3.4. All the bell-hangers are proposing stiffening and strengthening works to the bell frame with Taylors offering advice that it is more likely to have been the tower as opposed to the bell frame which was the reason for ringing ceasing. Higby and Taylors are both proposing steel fixings where Nicholson was proposing stainless steel fixings. Additionally, Taylors are proposing some extra strengthening works.

- 3.5. Matthew Higby's quote and Taylor's quote includes the tuning of all six bells whereas Nicholson's quote has the tuning of the bells as an extra costing £3,578.
- 3.6. Nicholson are additionally recommending a new headstock and a new wheel for Bell 1 (Treble) at a cost of £3,277. Taylor also recommends a new headstock, and both aim to lower the centre of gravity of this bell. Both companies have included this cost within their quotation but by comparison, Matthew Higby only recommends overhauling this bell. Further clarification on this should be sought from Higby.
- 3.7. Nicholson and Taylor have both included for the introduction of insulation as part of their costed works. It is not clear if Higby has included insulation and this needs to be confirmed.
- 3.8. Higby has not identified any savings if volunteer labour is used but has noted that their insurers do not permit this unless the PCC's insurance can provide cover. By comparison, Nicholson have identified that if the PCC are able to provide labour for all their site work, then there would be a reduction of up to £9,614. Meanwhile Taylors have identified a saving of £4,386 by using locally provided labour and a further saving of up to £2,688 if accommodation can also be provided.
- 3.9. Taylors additionally propose some other savings although even with these, Taylors remain the more expensive.
- 3.10. Taylors recommend testing the bells before removal to assess the condition of the frame prior to removal which seems sensible. Other bell-hangers have not commented on this.
- 3.11. All the tenderers identified the condition of the hidden foundation beams as being of concern and an allowance will be made in the Main Contract for the repair of these timbers.
- 3.12. The removal and reinstatement of the existing ceiling of the Ringing Chamber is also excluded and needs to be carried out by the Main Contractor.
- 3.13. Clockmaker's works is excluded by all and will be part of the Main Contract.
- 3.14. No electrical works are included.

Contingency

- 3.15. No contingency has been allocated by any of the Contractors and a figure of around 10% should additionally be set aside.

Contractual appointment

- 3.16. The intention is that the preferred bell-hanger will be identified and as a named or nominated sub-contractor of the Main Contractor.

4. Conclusion

- 4.1. Further clarifications should be sought from Matthew Higby on a number of matters, and this should help with preparing a more accurate comparative cost assessment.
- 4.2. The PCC should satisfy themselves of the financial position of any bell-hanger that they are considering using even though the appointment will be via the Main Contractor who therefore carries the majority of the risk.

5. Addendum

5.1. Clarification was sought from Matthew Higby on various points as follows (MH's response is in italics:

- Has any sound insulation been allowed for? If not, how much would it be to include it?

Further to our chat the other day, when we discussed the removal and replacement of the ringing chamber ceiling being undertaken by the main building contractor responsible for this project, I assumed that any insulation (which I assume would be packed into the void between the ringing chamber ceiling and the belfry floor) would have to be installed during that operation, and presumably by the same building contractor. I can't really see any other practical way that this would work.

- Please could you advise on a cost to upgrade bell frame plates and rods to stainless steel – Grade 316.

I doubt that there would be a huge difference in cost to be honest. It would probably make more sense to use galvanized steel for the corner brackets and 316 for the required bolts/coach screws, as getting large section steel in 316 is difficult.

- Would you test the bell-frame movement before removing the bells?

Whilst this seems a sensible plan, to enable the bells to be swung, a significant amount of nesting materials would need to be removed from the belfry, to give room for the bells to swing. The bell wheels would need to be temporarily repaired (mostly screwing the wheel shrouds back on), and some different bell ropes would need to be fitted (the old ones are significantly rotten). I guess this approach would also enable the various cracks in the walls to be monitored for movement at the same. I would be happy to do this work and gather some experienced ringers to carry out a test ring if required - let me know what you think.

- Please could you clarify why you would not modify Bell No1. I know we asked you not to, but others have suggested we should modify it to change the centre of gravity. Please could you comment briefly on this and provide a cost for replacement.

When Bell 1 was added to the ring in 1960, Mears & Stainbank chose to hang the new bell using a modern hanging method. As a result, it features a relatively small wheel and a shorter hanging radius compared to the original five bells. It seems likely that Mears assumed the fittings of the older bells would eventually be updated in a similar manner in the near future.

Currently, the hanging radius and wheel diameter of the treble bell are nearly ideal, at least by my standards (though I acknowledge that other bellhangers may have differing opinions). While the hanging radius could theoretically be adjusted by modifying the size of the hardwood pad between the bell and its headstock, there is minimal room for such changes. The bell fits very tightly in its pit, with the clapper flight clearing the frame end by only about half an inch, according to my measurements.

Given these considerations, I believe it would be best to leave the treble bell as it is and instead rehang the larger bells using a similar hanging method. This approach would ensure the swing and clapping times across the ring are perfectly synchronized.

- We note your comment about volunteering savings and insurance challenges. If we can get insurance, can you give any indication of the level of saving that might be possible?

This is a tricky situation! Our insurers view "untrained operatives" working at height or lifting heavy objects as a significant risk and therefore exclude these activities from our employer's liability insurance. While I'm aware that some firms offer substantial discounts for DIY helpers assisting their bellhangers, our insurance advisors have made it clear that coverage in such cases is highly uncertain and strongly recommend we avoid this practice. Interestingly, our competitors seem to disregard the same advice!

I believe we need to determine exactly what tasks the locals are capable of handling. For instance, if they could clear out the entire tower and assist with general fetching and carrying, I could calculate an appropriate allowance. Let me know your thoughts!

6. Comparative Assessment

- 6.1. Based on the figures provided and with the knowledge of the above, the following comparative assessment is presented:

Matthew Higby - Original Tender - £46,635 but this does not include any insulation, nor any savings offered by using volunteers. Assuming an insulation cost of say £1,000 this would give a comparative tender cost of **£47,635**

Nicholson – Original Tender - £61,086 to which the tuning cost of £3,578 needs to be added. To allow comparison with Higby, the cost of £3,277 for not rehangng the No1 bell needs to be subtracted. Nicholson have then proposed a saving of up to £9,614 by using volunteers which potentially leaves comparative tender of **£51,773**.

Taylors – Original Tender - £66,150.00 from which savings of £4,386 for local labour; £2,688 for accommodation and up to £2,602 of other savings giving an adjusted comparative tender cost of £56,474. Should the rehangng of the No1 bell also be omitted then a reduction of £3,000 could reasonably be assumed giving a comparative tender figure of **£53,474**.

7. Recommendation

- 7.1. The assessment suggests that Matthew Higby's quote probably offers the best value but prior to making any appointment, the DAC's Bells advisor's input is now sought in relation to the details proposed.