

**ST MICHAEL'S CHURCH, ALNWICK,
NORTHUMBERLAND**

**ARCHAEOLOGICAL OBSERVATIONS ON THE
INTERNAL STRUCTURE OF THE UPPER TOWER**



JB Archaeology Ltd

On behalf of

St Michael's PCC

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1.0 INTRODUCTION

- 1.1 This document presents the results of archaeological observations on the internal elevations of the upper part of the tower of St Michael's Church, Alnwick. The observations and report are part of a programme of works for the repair and consolidation of the tower being carried out under faculty. The observations are limited to the ringing chamber and the top of the spiral stairs as these are the areas that show a number of unexpected features in the stonework.
- 1.2 The investigations were undertaken by JB Archaeology Ltd. on behalf of St Michael's PCC on the 14th September 2020.

2.0 OBSERVATIONS

Ringling Chamber

- 2.1 In the ringing chamber the most obvious features are the various lines of regular holes in the stonework which can be seen in the eastern and western elevations. In both elevations there are two lines of holes, the upper row is c. 1m below the floor level of the belfry with a second line of holes approximately level with the sill of the windows (Plate 1). These regular lines are only present in the eastern and western elevation with only a single hole in the northern elevation at approximately sill level (Figures/Panoramas 1-4). It would normally be assumed that the rows of holes would line up across the chamber and would seem to be for joists for a now missing (?earlier) floor(s). However, with the current level of survey they do not appear to line up with each other, though a more detailed survey may be able to refine this.
- 2.2 One of these possible joist holes in the eastern elevation could be seen to contain a finely worked architectural stone at the rear of the recess, suggesting a reconfiguration of the wall, in at least this area, using salvaged stonework (Plate 3).
- 2.3 In addition to the lines of possible joist holes the remains of a timber baulk (?joist) towards the north side of the western elevation with a corresponding stub in the south side of the eastern elevation is also possibly indicative of an earlier floor (Plates 4&5). It is interesting to note that the remains of the baulk

appear to have a potential relationship with the step in the stonework of the north wall (Plate 5).



Plate 1. Eastern elevation

(D Beaumont)

- 2.4 Directly above where the remains of the timber baulk there is a noticeable change, in all four internal elevations, in the form of the stonework. This is *c.* 1m below the floor level of the belfry (Plates 1, 2, 4 & 5). This, along with the holes described above, strongly suggest a rebuild or at least a re-configuration of the upper portion of the tower – i.e. the ringing chamber and belfry.
- 2.5 Although there currently seems to be strong evidence for changes in floor levels within the ringing chamber there is also much evidence for current floor having been established for a long time. The main evidence for this is the fact that the current floor level is the same as the one that survives on all existing plans of the church and that it seems to relate well to the level of the sills of the current windows. Though the sill of the two windows are formed differently in each elevation which could suggest past alterations. Further evidence is the presence

of at least two lantern niches in the western elevation with sooting on the upper stonework (Plate 6).



Plate 2. Western elevation

(D Beaumont)



Plate 3. Joist holes in east elevation, note worked stone in 2nd from right and slope of the right hand socket



Plate 4. Timber baulk in east elevation, note change in stonework above baulk



Plate 5. Timber baulk in west elevation and note change in stonework



Plate 6. Lantern niche & irregular stonework in window reveal in W elevation

- 2.6 A closer inspection of the stone work around the doorway into the ringing chamber and the on the southern side of the window in the western elevation noted some marked discontinuities in the stone coursing (Plates 7&8). Changes in the coursing such as that seen here is not readily obvious anywhere else in the ringing chamber and may also indicate some form of rebuild in this portion of the tower. This could well be related to the features noted at the top of the spiral stairs, on the other side of the door to the ringing chamber, which are discussed below.



Plate 7. Irregular stone work over door in south elevation



Plate 8. Irregular stone work in window reveal

Spiral Stairs

- 2.7 Probably the most obvious feature in the upper part of the tower, and one that has been commented on before (Ryder, ND, 8, and Ryder, 2018, 2), is the abrupt change from the spiral stone stairs to the straight run which enters the belfry. At the point of change there is also the access to the ringing chamber. It can be clearly seen that the spiral stairs originally (or at least in an earlier configuration) continued upwards and have been blocked off (Plate 9). This is visible in both the stonework constructed across the steps and the underside of the continuing spiral. Where the spiral has been blocked off the stone work has all the appearances of being a blocked opening – a window or more likely a door as it extends down to the step of the stairs. The head and jambs of the opening can be seen to have carefully chamfered stonework suggesting a well formed, intended to be permanent, opening (Plate 10). As this opening would, currently, be straight out into the southern elevation it does not appear to be leading anywhere, so potentially a window here is a more logical explanation. However, there are no other windows at this height in the tower and no obvious signs of blocked openings in any of the external elevations. One possible option is that there may have been a second ‘turret’ to mirror the one in south-eastern corner of the main body of the church and that later works have removed much of the evidence for this.
- 2.8 From the evidence of the remains of the continuation of the spiral stairs it would seem that it originally (or in a different phase) continued up for at least another floor. If this were the case it would seem possible that it may have provided

access to a now missing floor represented by the upper row of possible joist holes seen in the ringing chamber as described above.



Plate 9. Top of spiral stairs showing continuation of now blocked of spiral (D Beaumont)

- 2.9 The current awkward transition from the spiral stairs to the ringing chamber may also be a result of later changes. This could then mean that the lower set of

possible joist holes represents that earlier floor which was accessed in some way from the spiral stairs and the change in floor level now gives the awkward transition. But it should be noted that this would make the lantern niches at floor level, though this could be explained by an earlier joist holes being re-used as a lantern niches.



Plate 10. Probable blocked opening in south elevation

3.0 DISCUSSION AND CONCLUSIONS

- 3.1 Overall, the various features described above show that at least the upper part of the tower has undergone several changes and alterations. There are known works carried out in 1818 and 1863 but from the many changes of style within the building there have obviously been major changes throughout the life of the church.
- 3.2 These changes would seem to strongly indicate that the upper portion of the tower, consisting of the ringing chamber and belfry, has been partially re-built or re-modelled, or even potentially extended upwards. This can be seen in the two changes in floor levels shown by the joist holes in the eastern and western elevations. A possible third floor level is indicated by the remains of the timber baulk and the change in the stone work on all side of the tower level with the marked step in the stone work in the northern elevation.
- 3.3 However, none of these features are visible in the external fabric of the tower. One possible explanation for this is that when the re-modelling took place that lead to the creation of these features the outer skin of stone work was all 'redone' in order to produce a uniformity in external appearance. At the moment there is

no evidence for when this happened but the initial results of the graffiti survey on the roof of the tower has recorded a large lead plaque on the roof with a series of initials and the date 1764 (Plate 11). So far this is the earliest date identified in the graffiti on the roof and could suggest a *terminus post quem* for the current configuration of the roof.



Plate 11. Lead plaque of 1764

- 3.4 There is also a noticeable difference in some of the major timbers in the floor of the belfry – a massive beam with 19th century Baltic timber marks – and the roof beams which appear to potentially be medieval. Again, this also suggests much re-use and remodelling and a programme of investigation into the timbers and dendrochronological dating may shed light on this.
- 3.5 In conclusion from the brief examination of the interior of the ringing chamber and top of the spiral stairs it would appear that an earlier form of the tower had the spiral stairs continuing up to at least another floor. In this form the stairs would have also provided access to a floor which was slightly higher than the one currently seen in the ringing chamber. At some point the now blocked opening in the southern elevation was inserted through the turn of the spiral stairs thus potentially isolating the earlier upper floor. What this opening was for is uncertain but it would either be a window or doorway. If it was a window then it would normally be assumed that there would be others in the tower to provide some form of symmetry, which there do not seem to be. For it to be a doorway then it would need to lead to a room or space of some form. Currently

it would have opened into 'fresh air' but, as mentioned above, if a matching turret had been built on this corner it would have provided access to that.

- 3.6 If there was a turret(s) added to the tower in the later 14th century, as currently proposed on the phase plan of the church, this would suggest that at least parts of the tower are pre-14th century for this opening to cut through the stairs. This in turn suggests that if the discussion outlined above is correct then the joist holes visible inside the ringing chamber are part of a pre-14th century configuration of the tower.
- 3.7 All of the observations and discussions above are based on a relatively brief inspection of the ringing chamber and stairs along with discussions with David Beaumont. It would seem very probable that a much more detailed survey of the interior of the top of the tower, along with examination of the fabric of the tower during any works, would provide much more information on how the top of the tower has evolved.

Acknowledgements

I would like to thank David Beaumont for inviting me to undertake the project and Jean Darby for locking up after me.

References

- Ryder, PF, ND, The Parish Church of St Michael, Alnwick. Analysis of the Fabric and Archaeological Assessment.
- Ryder, PF, 2018, Alnwick St Michael's The Tower and Bell Frames, some comments

FIGURES

In the figures below the four elevations of the upper portion of the tower are shown along with panoramic photographs of each of the elevations. Due to the limited space available and the size of the elevations being photographed there is a degree of distortion in the image which cannot be corrected for. The limited space also meant that there is a slight oblique angle to each image as it was not possible to take photographs square on and still encompass the whole elevation.

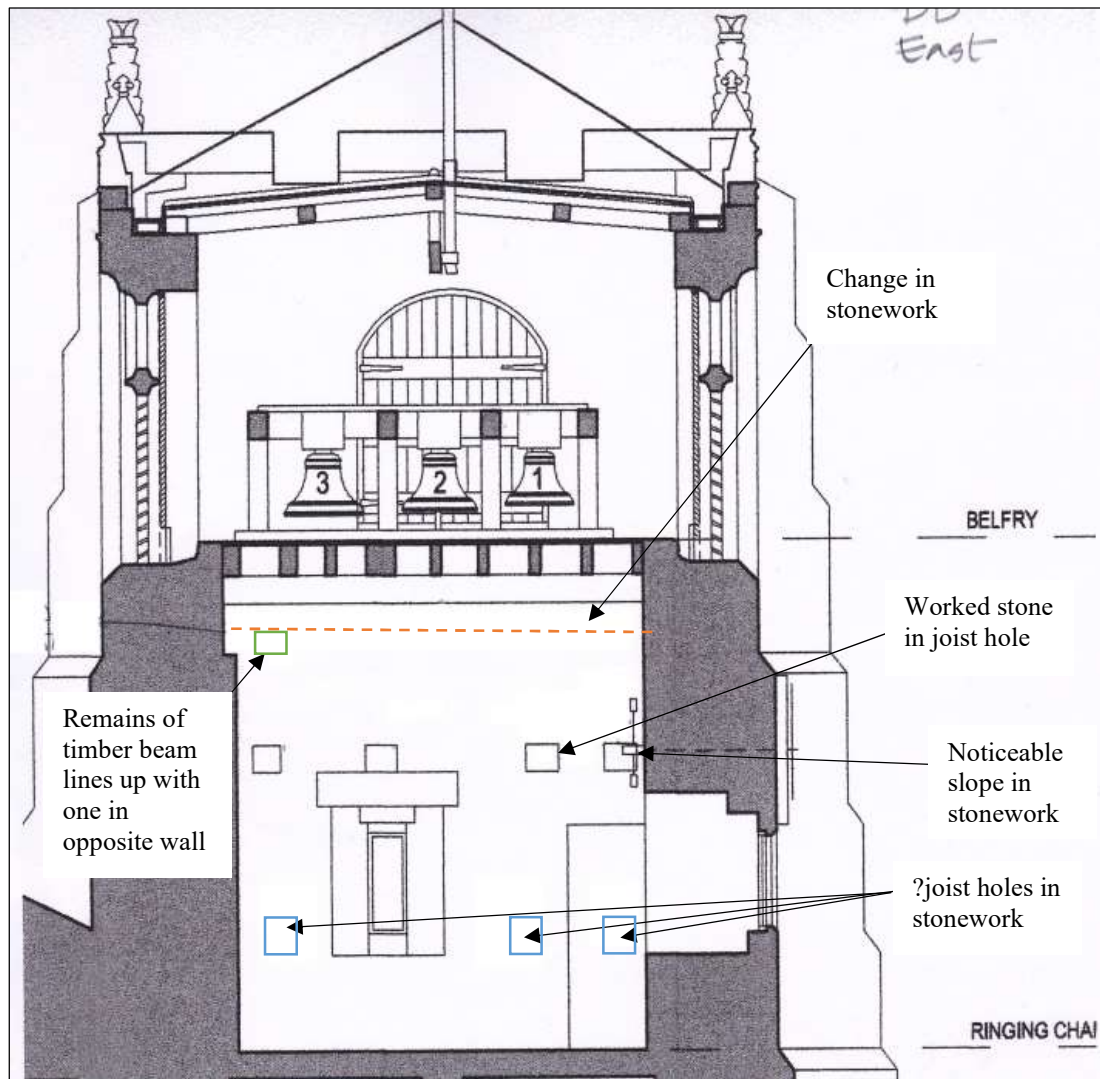


Figure 1. Eastern elevation

(D Beaumont)



Panoramic view of eastern elevation

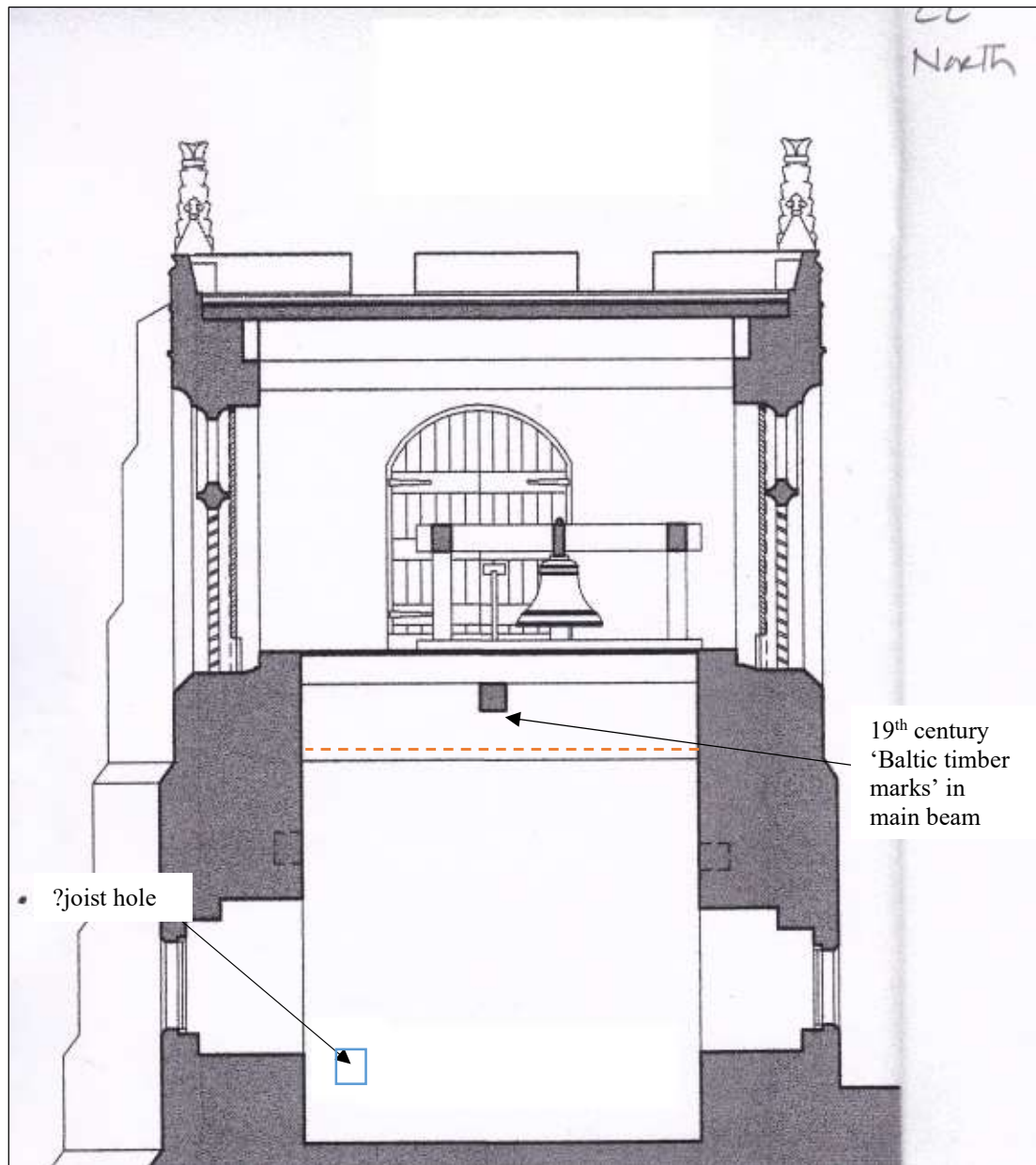


Figure 2. Northern elevation

(D Beaumont)



Panoramic view of northern elevation

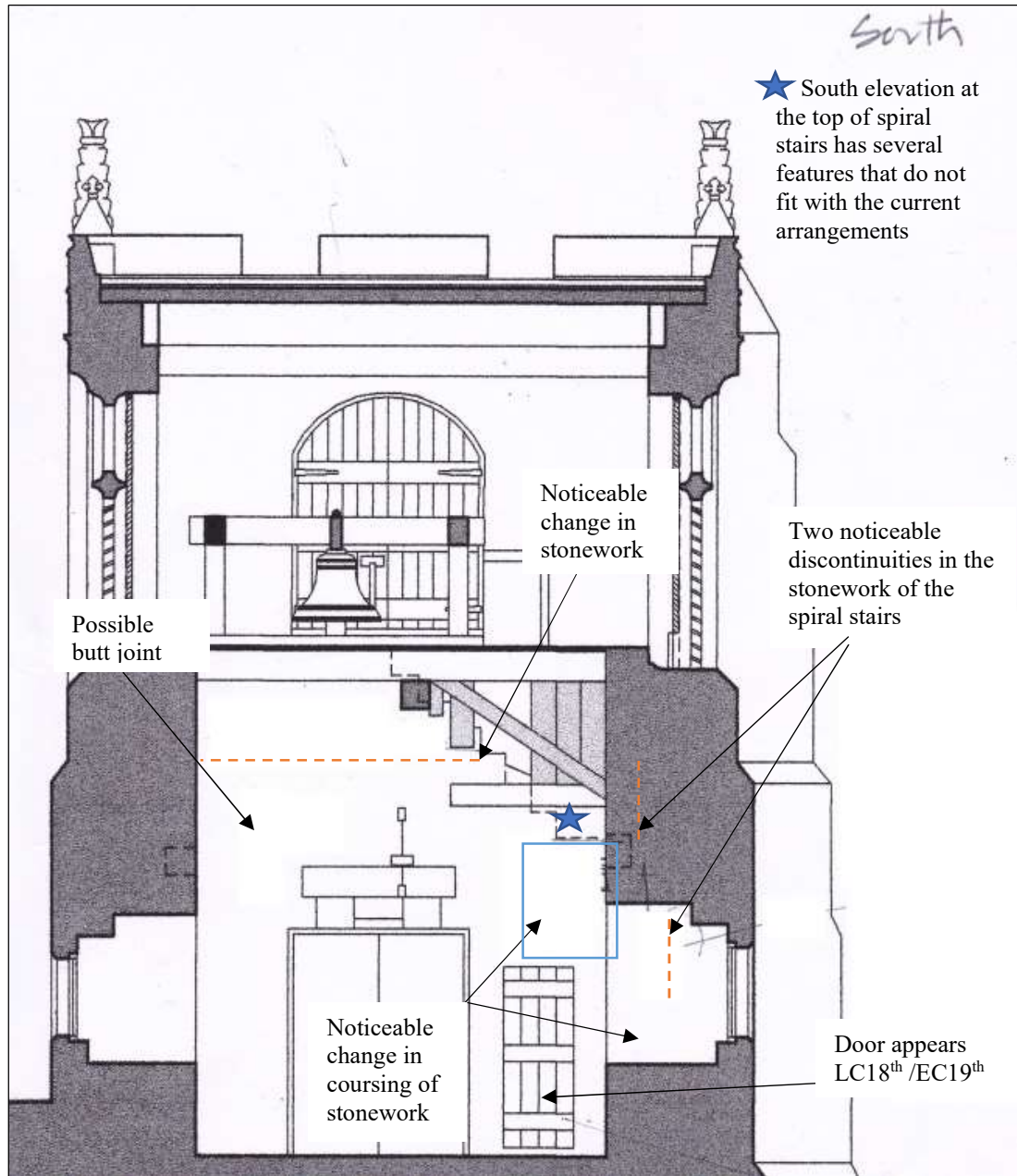
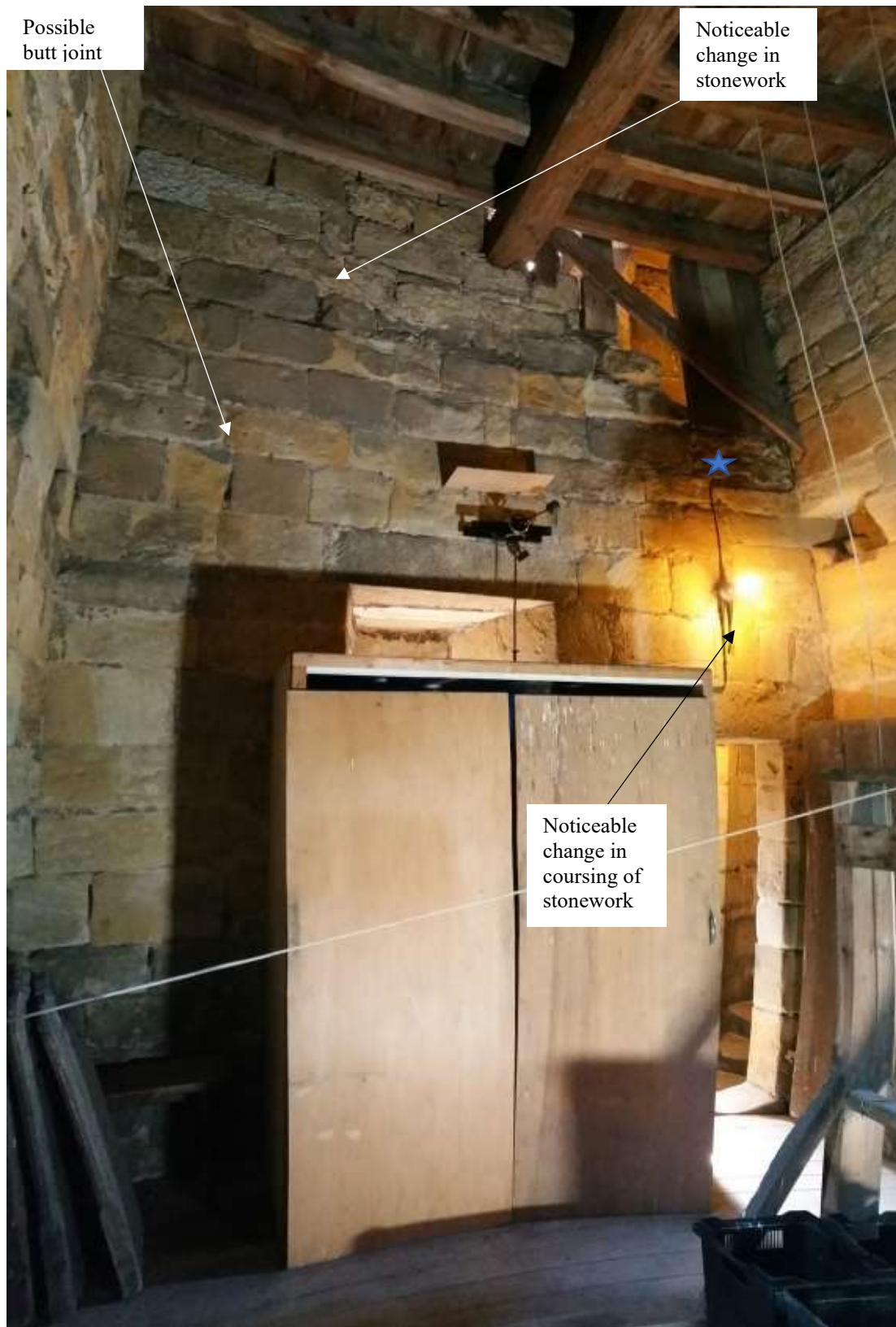


Figure 3. Southern elevation

(D Beaumont)



Panoramic view of southern elevation

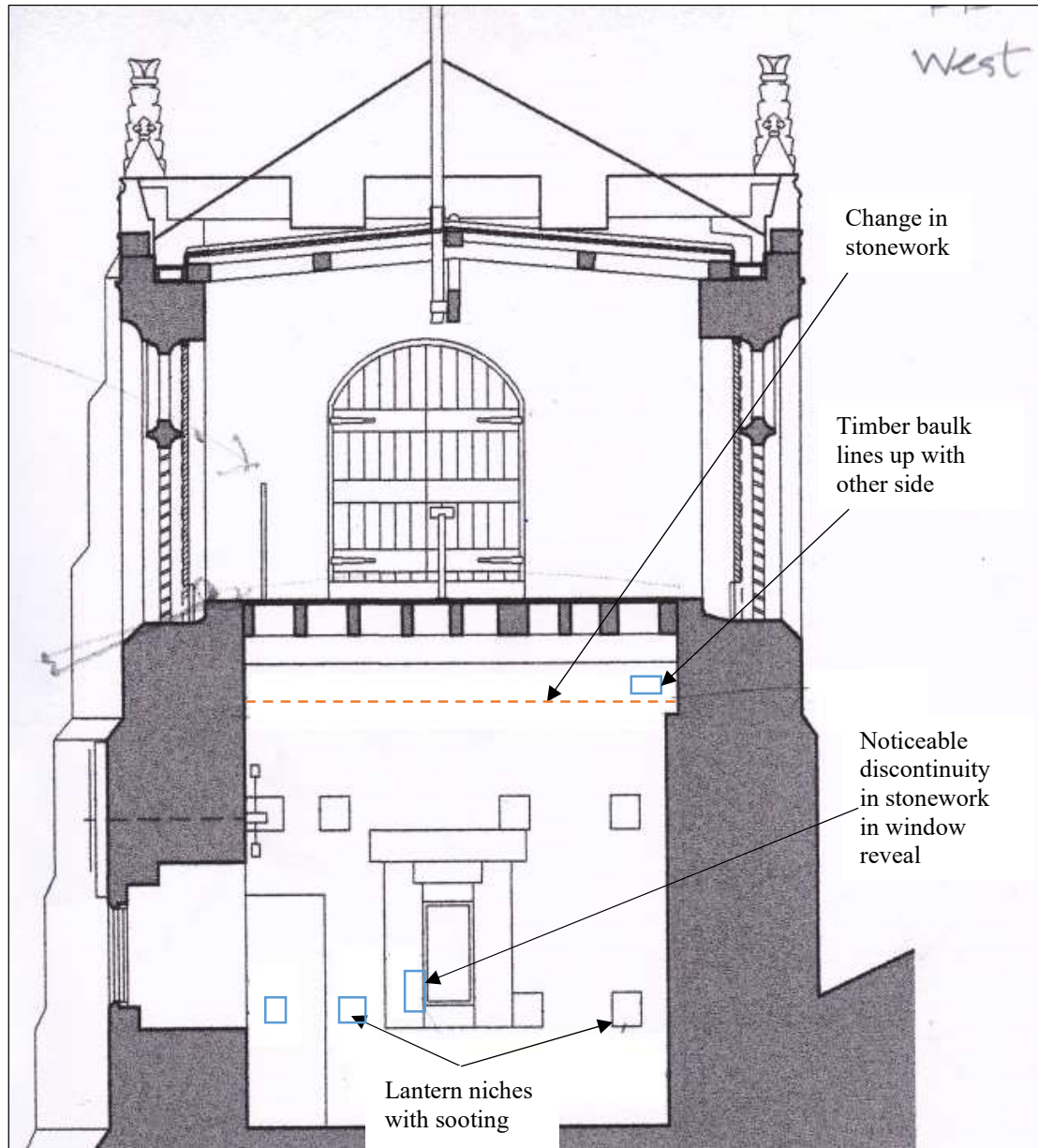


Figure 4. Western elevation

(D Beaumont)



Panoramic view of western elevation