

**THE CHURCH OF  
ST. GEORGE THE MARTYR  
BOROUGH  
SOUTHWARK**

**A LEVEL 1 RECORD OF THE BELL FRAME**



**Compiled by Dr. John C. Eisel *FSA*.**

**DECEMBER 2011**

This report is produced by

Dr. J.C. Eisel *FSA*  
10 Lugg View Close  
Hereford  
HR1 1JF

Tel. (01432) 271141

for

**The Archbishops' Council**  
Church House  
Great Smith Street  
London  
SW1P 3AZ

Dr. J.C. Eisel is a research specialist on the development of bell frames and has acted as a consultant to English Heritage and as an adviser to the Church Buildings Commission. He has lectured on the subject to both the Institute of Field Archaeologists and to a seminar organised by the then Council for the Care of Churches. He was a contributor to Chris Pickford's *Bellframes. A practical guide to inspection and recording* (1993), and to *The Archaeology of Bellframes: Recording and Preservation* (1996), edited by Christopher J. Brooke. Semi-retired, he undertakes the occasional commission.

© J.C. Eisel 2011

*Cover: Engraving of the church and spire of the church of St. George-the-Martyr, Southwark, published c.1776.*

**THE CHURCH OF ST. GEORGE THE MARTYR,  
BOROUGH,  
SOUTHWARK.**

**A Level 1 record of the bell frame**

**TEXT AND LAYOUT**

Dr. J.C. Eisel *FSA*

**SURVEY**

Dr. J.C. Eisel

Mrs. M.P. Eisel

---

**Contents**

1. Introduction
2. Recording
3. Description
4. Conclusion
5. Sketches

# **The Church of St. George the Martyr BOROUGH, SOUTHWARK**

## **A LEVEL 1 RECORD OF THE BELL FRAME**

---

---

### **1. Introduction**

---

In this report is contained a Level 1 record of the bell frame at the church of St. George the Martyr, Borough, Southwark. It was compiled by Dr. J.C. Eisel, after site visits on 7 and 12 May 2010, when he was assisted by Mrs. M. Eisel. The first stage of a recording process is an appraisal of the frame, and that on which this report is based is given as a separate report.

---

---

### **2. Recording**

---

These record drawings take the form of dimensioned sketches, redrawn in fair copy but not to scale. As the sizes of timbers vary slightly, dimensions are given to the nearest 10mm.

Fig. 1. Plan at frame-head level.

Fig. 2. Plan at sill level.

Fig. 3. Sketch of supporting timbers.

Fig. 4. E-W section.

Fig. 5. N-S section.

---

---

### **3. Description**

---

The bell frame is of conventional layout (Pickford Type 8.3), and is approximately square, except for the north-west corner, which is angled, owing to the provision for a spiral staircase. (Fig. 1) Apart from that, the frame sits well within the tower, with a similar clearance of about 10 mm between the frame heads and walls on each side. Because of the offset frame heads, the outer sills are immediately adjacent to the walls. The position of each bell is marked on the sketch of the layout at frame-head

level, as well as the position of the wheel and the rope-fall at pulley level, the latter indicating to what extent the rope is drawn between the wheel and pulley.

Cut-off tenons in the frame-heads indicate that the timber which divides the treble and second bell pits was repositioned slightly further to the south, to make a pit long enough for the second bell to swing in. (Fig. 1) However, there is no evidence of a bearing indent corresponding to the initial position of the dividing timber.



**The dividing timber between the pits for the treble and second bells. The cut-off tenon shows as a dark rectangle on the side of the frame head.**

The form of the trusses can be deduced from the sketch of the frame at sill level, illustrated in Figs. 4 and 5. The truss form used is of a pair of inclined braces, with jack-braces above and below, i.e. to sill and frame-head. In general, the bells hang symmetrically between the braces. This truss form is found in all the trusses of the four parallel pits, and in the east elevation of the frame, where there are two pairs of braces. Because of reduced space, the trusses which close the four parallel pits only have one pair of braces, and one single one on the north side inclined towards the centre of the frame. The west elevation has only one pair of braces, wider apart and necessarily at a lower rake, with the result that neither the treble nor second bell hang at the centre of a truss. (Fig. 2)

---

---

## 4. Conclusion

---

The detailed examination of the frame confirms that the frame is of one basic build, with minor alterations. While the alteration in the position of the timber dividing the treble and second bell pits, from a position immediately above a corresponding timber in the sills, to one slightly further south, suggests that the frame may have been reused from the former church, there is no evidence that a bell had hung in the second bell pit when the timber was in its primary position. Also, the frame is a very good fit in the tower. All this suggests that the frame was probably made for this tower, and that when the frame was constructed, no allowance had been made for angle caused by the staircase at the north-west corner, so that modifications had to be made when the frame was installed in the tower.

---

---

## 5. Sketches

---

- Figure 1. Sketch plan of the bell frame at frame-head level, with running dimensions, site north to top. Hanging positions are indicated, as are the positions of the wheels and rope drop a pulley level.
- Figure 2. Sketch plan of the bell frame at sill level, with running dimensions, site north to top. The positioning of the braces and jack braces is approximate only
- Figure 3. Sketch plan of the supporting floor on which the frame rests, with running dimensions, site north to top.
- Figure 4. Dimensioned sketch of E-W section of frame, showing south elevation of the truss between the seventh and tenor bells.
- Figure 5. Dimensioned sketch of west elevation of the easternmost truss of frame.

The Church of St. George the Martyr, Borough, Southwark.

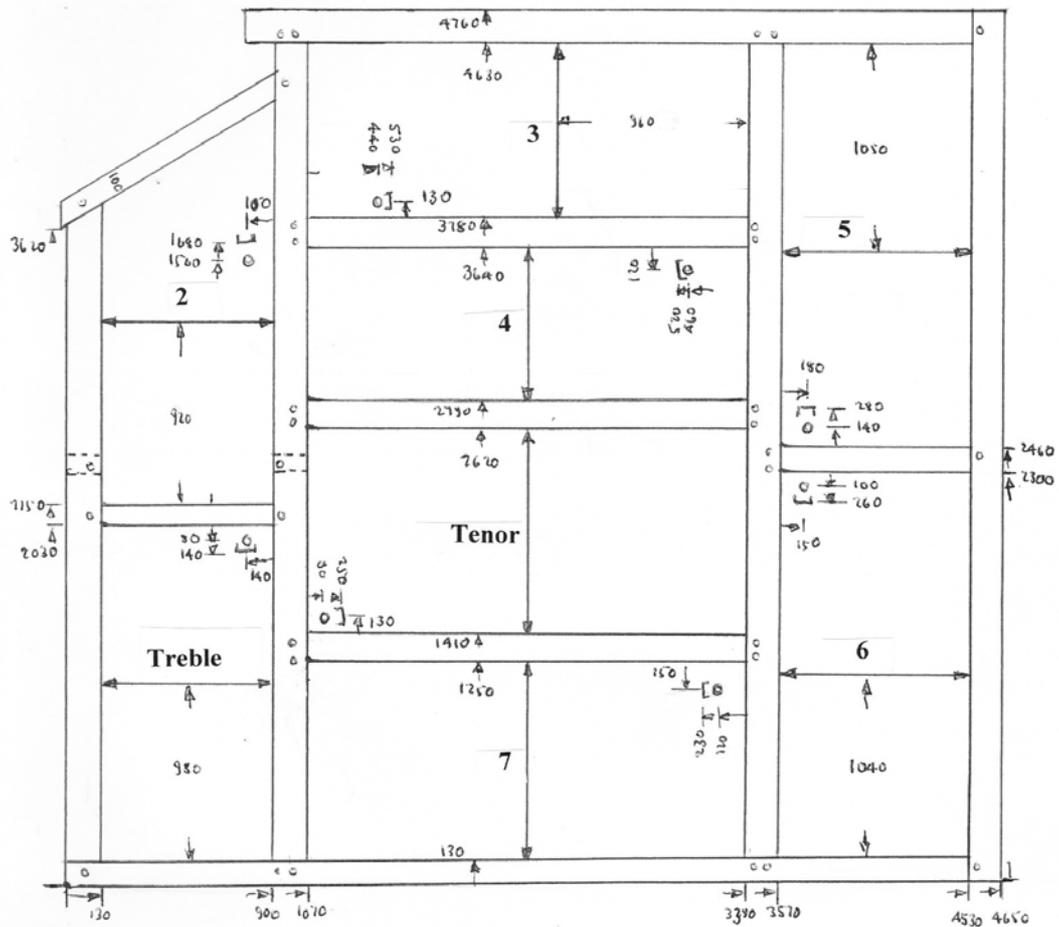


Figure 1. Sketch plan of the bell frame at frame-head level, with running dimensions, site north to top. Hanging positions are indicated, as are the positions of the wheels and rope drop pulley level.

The Church of St. George the Martyr, Borough, Southwark.

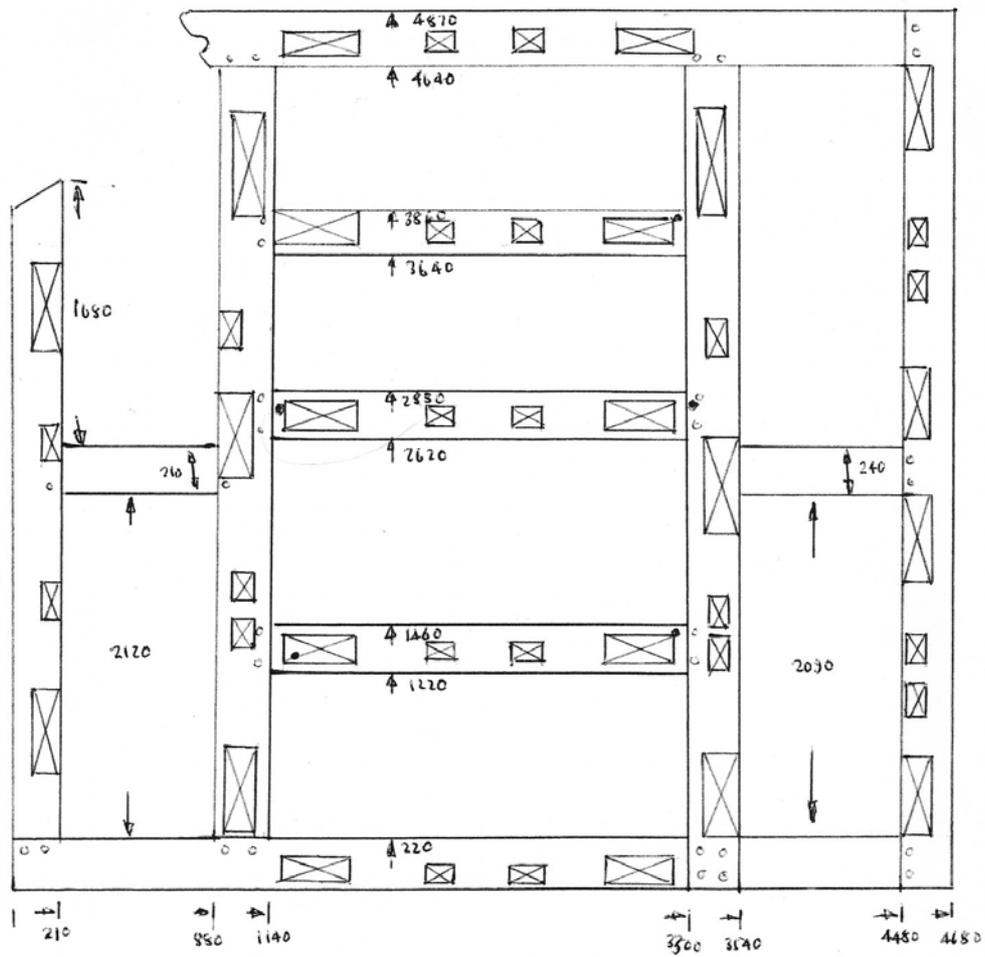


Figure 2. Sketch plan of the bell frame at sill level, with running dimensions, site north to top. The positioning of the braces and jack braces is approximate only

The Church of St. George the Martyr, Borough, Southwark.

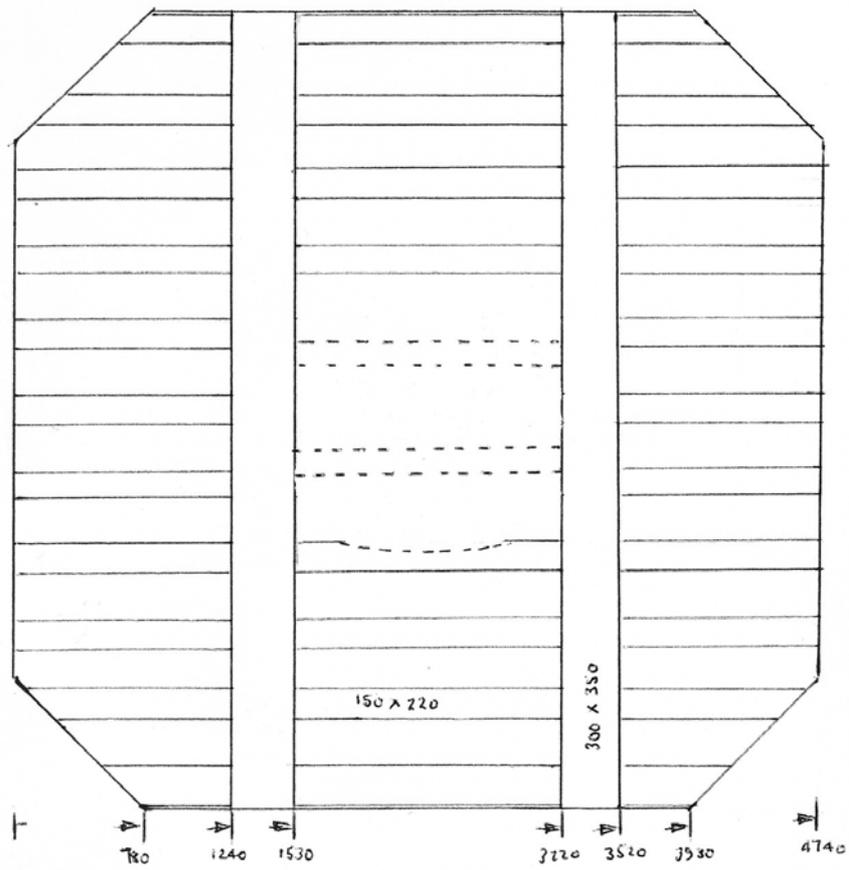


Figure 3. Sketch plan of the supporting floor on which the frame rests, with running dimensions, site north to top.

The Church of St. George the Martyr, Borough, Southwark.

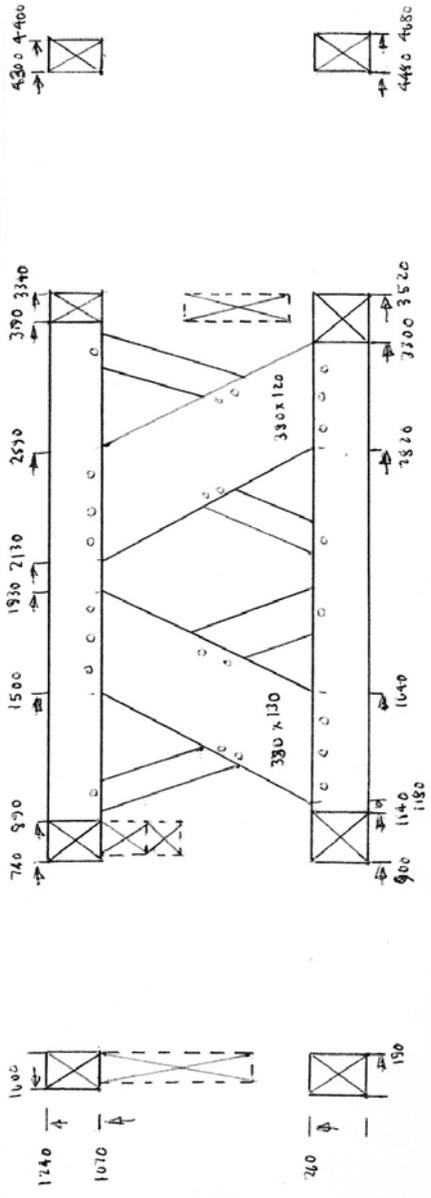


Figure 4. Dimensioned sketch of E-W section of frame, showing south elevation of the truss between the seventh and tenor bells.

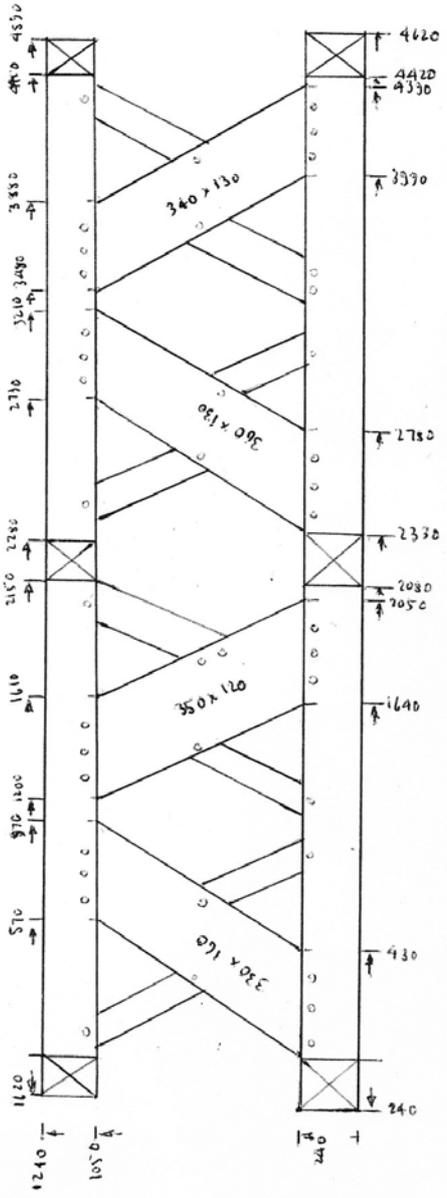


Figure 5. Dimensioned sketch of west elevation of the easternmost truss of frame.