

The Church of St Matthew, Morley.

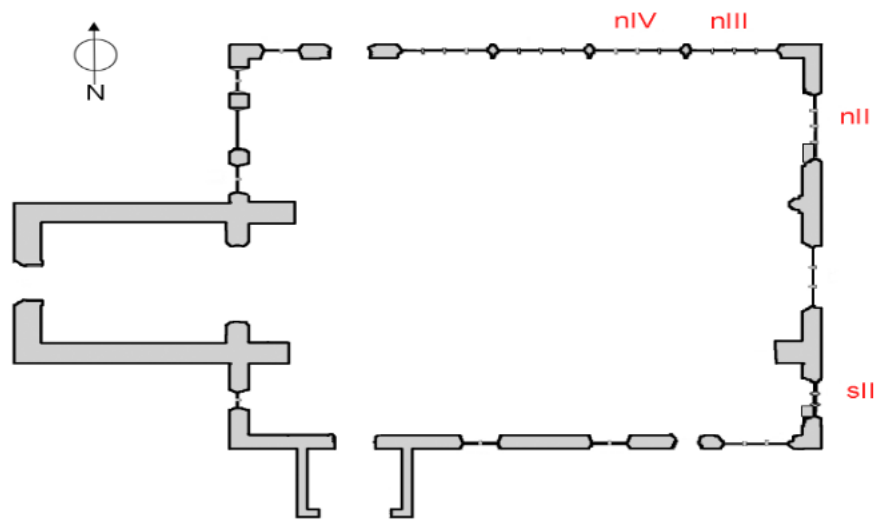


Report on the Conservation of the Glazing.
Windows sII and nII.

JIM BUDD
STAINED GLASS

July 2025

Icon 
ACCREDITED MEMBER



Above. St. Matthews's Church, Morley. Plan indicating windows sII, nII, nIII, nIV.

3. THE SIGNIFICANCE OF THE STAINED GLASS.

The late medieval glass at Morley is considered to be outstanding both in the iconography and the quality of glass of the period.

Much glass survives from a monastic scheme of glass from nearby Dale Abbey. This glass is thought to be from the cloister at Dale Abbey and dates from approximately 1480. It has been documented that the window masonry and stained glass were bought and set up at Morley following the dissolution of the abbey in 1539.

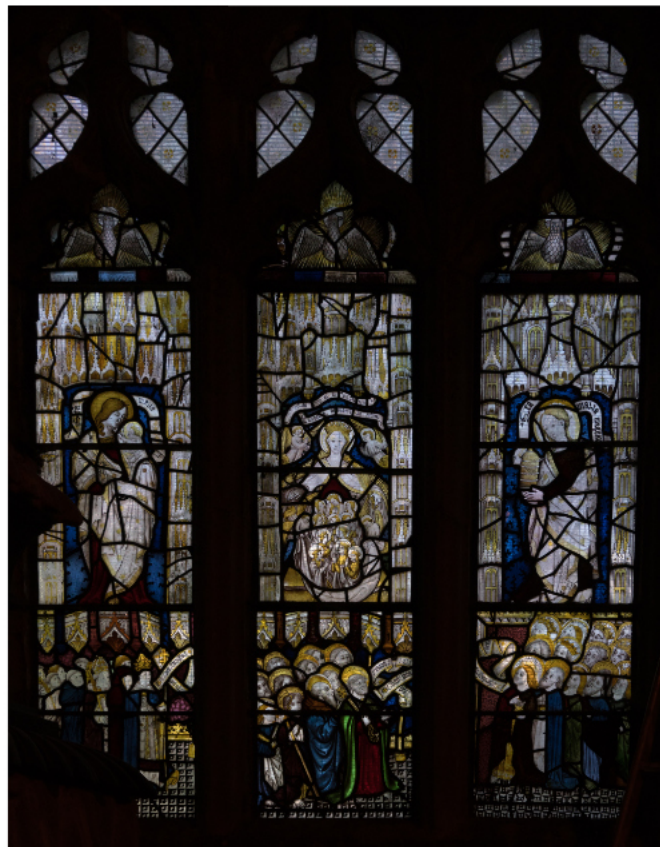
Five perpendicular windows (nII-nVI) from the abbey were incorporated into the north aisle and north chapel. The glass had fallen into dis-repair by the early 19th century prompting a major restoration by Warrington of London in 1847. Windows nV & nVI now contain only 19th century work by Burlison and Grylls.

Windows sII and nII also contain glass also of the late fifteenth century that is thought to be original to the church and has been dated to between 1470 and 1480.

For further information, a full description of the windows which includes a detailed bibliography of the glass at Morley was researched by Allan Barton in 2004 as part of his PHD thesis 'Stained Glass of Derbyshire and Nottinghamshire 1400-1550'. pp. 342-374. www.academia.edu



Window sII. Before and after conservation.



Window nII. Before and after conservation.

CONSERVATION REPORT.

Phase 1 Contract Period: September 2024- May 2025

Conservators: Jim Budd ACR, Amy Hall, Hannah Daniels, Hannah Ramsey, Elliott Warrington.

South aisle east window sII. North aisle east window nII.

The stained glass panels were removed from the stonework using tungsten tipped masonry chisels. The mortar was generally very hard cementitious mortar and required careful removal.

The openings were temporarily boarded up with twin wall polycarbonate screwed to internal timber spars. Two separate templates of the masonry openings were made, one profiling the inner masonry for the bronze frame construction, and the other, the exterior masonry for the use in the construction of the protective glazing and the wire guards.

The exterior protective glazing was created using 3mm kiln-distorted glass, The glass was leaded to follow the main design lines of the stained glass panels in nII and to follow the ferramenta in nII.

Sheet-lead condensation trays was fabricated with a 50mm internal up-stand.

The lead trays were filled internally with drainage gravel.

The existing internal wrought iron support bars were discarded.

The external ferramenta on window sII was found to be made of cast iron. Stainless steel tips were welded to each bar. Sections of bar were replaced where the profile was deemed to be inadequate due to corrosion. Both vertical stantions were replaced in forged stainless steel.

New internal tie bars of 12mm patinated brass were introduced throughout. The panels were installed into the openings and pointed up with hydraulic lime mortar.

Wire guards were fabricated from stainless steel mesh and finished with satin black powder coating. The wire guards were fixed with stainless steel clips and screws and nylon plugs.

The panels were inspected and photographed.

Rubbings were taken of the stained glass panels to record the pattern of the lead matrix and any interventions.

In window sII, 20no. cracks were edge-bonded with Araldite 20:20 epoxy resin.

In window nII, 35no. cracks were edge-bonded with Araldite 20:20 epoxy resin.

The division leads were replaced, otherwise all the existing lead matrix was retained in the main lights. The lead matrix was repaired with solder where necessary. Small gaps between the glass and original lead were selectively filled with lead light cement.

All of the existing medieval lead matrix was retained in the tracery lights.

Following test cleaning to ensure the stability of painted surfaces the glass was lightly cleaned using smoke sponges and by a swabbing with cotton swabs soaked in de-ionised water. All cleaning processes were undertaken under magnification.

The panels were fitted into 9mm x 14mm x 2mm U section manganese bronze frames. The frames were fitted with Phosphor-bronze clips and fixed into position with brass screws into nylon plugs.

All interventions were recorded on the rubbings, which are stored in the glaziers archive. Panels were photographed before and after conservation.

FUTURE RECOMMENDATIONS

It is recommended that the stained glass be inspected quinquennially.
Please see attached care information.

ARCHIVE MATERIALS

Photographs: Digital Format, Sony A7 camera, catalogued with hard drive back up. Photographs taken in situ, pre-conservation and post conservation.

Diagrams: Pre-conservation rubbings annotated with post-conservation details stored in the studio archive.

CONSERVATION MATERIALS USED

Cleaning: De-ionised water, Acetone.

Adhesives: Epoxy Resin Araldite 20:20.

Filling: Phoenix Brand Lead light cement.

Leading: Heaps, Arnold & Heaps, various profiles.

Flux. Tallow.

Solder: GW Neale & Sons K grade 60%tin:40%lead solder.

Framing: 14mm x9mm x2mm U section manganese bronze, 8mm brass bars, phosphor bronze fixing clips, copper rivets, 1mm sheet lead tape, brass screws, nylon plugs.

Exterior glazing: 3mm kiln distorted float glass. Mommer lead, various sizes.

.Hodgsons lead light cement.

12mm round brass bars, patinated. AG Woodcare Antiquing Fluid.

Fixing: Hydraulic lime mortar. NHL3 with mix of fine sands.





Above. sII. nII. Interior view of exterior secondary glazing prior to installation of the stained glass.



Above. sII. nII. Exterior view of exterior secondary glazing prior to installation of the stained glass.



Above. sII. Exterior view of glazing. Before and after conservation.



Above. nII. Exterior view of glazing. Before and after conservation.



Window s11. Studio photographs. Post conservation.



Window nll. Studio photographs. Post conservation.



Above top. Panel A2. In situ, prior to removal.
Above. Panel A2. Following conservation.

ADVICE FOR THE CARE OF STAINED GLASS FOLLOWING CONSERVATION.

An important part of the conservation process is the continued monitoring of the condition stained glass and the performance of any interventions such as protective glazing.

The studio will undertake 10 yearly inspection of the stained glass and will advise the client should any action be required.

The appointed church architect will usually undertake a general survey of the glazing on a quinquennial basis.

It is important to periodically observe the stained glass and to contact the studio with any concerns as they arise. The following are signs to look out for:

1. Movement in the panels under wind pressure. This may be caused by missing perimeter pointing; loose metal tie-bars, broken copper tie-wires, broken or loose fixings.
2. Seeing daylight between the glass and lead. This may be caused by structural instability in the stained glass often resulting from subsidence or movement in the masonry.
3. Broken glass. This can be caused by buckling of the lead matrix of the window or by vandalism.

Adequate protection of the window against vandalism or accidental damage should be provided accordingly. This may include welded mesh wire guards, polycarbonate sheeting or in extreme circumstances, laminated plate glass.

Stained glass should only be cleaned by a conservator.

The painted surface decoration on the interior face of the glass is often extremely delicate and can be irreparably damaged by any type of abrasion. Cobwebs may be removed from the perimeter of the glazing using soft bristle brushes, however the surface of the glass should not be touched under any circumstances.

In an emergency where glass is damaged, please adhere to the following procedure:

1. Photograph the panel/window immediately.
2. Pick up all the pieces both internally and externally; this should be thorough, as it may be possible to bond the pieces together or at least to provide the detail for a replacement piece.
4. Carefully remove any loose fragments that are likely to fall, if safe to do so.
5. Do not use adhesive tape to join pieces together as this may damage painted surfaces.
6. Contact a stained glass conservator to board up the window. The window should be boarded up without causing further damage to the glass by the use of inappropriate fixings or methods.

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