By Appointment to
Her Majesty The Queen
Decorators & Gilders
Hare & Humphreys Ltd

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CONSERVATION REPORT
ST PETERS CHURCH, PRESTON PARK, BRIGHTON, BN1 6SD
May-September 2018

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Fig. 1 Witness patch left in the North East corner of the chancel documenting the contrast in colour before and after treatment.

FIGURES

1] PRELIMINARIES

1.1] BRIEF

Hare and Humphreys were invited by the Friends of St Peters to carry out cleaning and conservation to the stencilled chancel of the Grade II Listed 13th Century flint church St Peters, Preston Park, Brighton. The stencilling which decorated the chancel is clearly not original to the construction of the Church and locally believed to have been painted following the disastrous fire at St Peters in 1906. Interestingly, during treatment and upon close inspection, areas of losses expose an earlier scheme, possibly the original medieval paintings or the earlier 19th Century scheme over which a layer of plaster had been applied (Fig. 2). Paint analysis was not included in the project brief but would be interesting to consider in the future.

1. 2] CONDITION REPORT SUMMARY

Prior to treatment, the chancel at St Peters presented a severe build up of both surface dirt, ingrained dirt and grime, flaking paint, structural damages associated with extensive damp and consequential losses to the scheme. Areas identified with most extensive damage were identified in the corners of the chancel and the lower green areas, particularly the south wall which has been most severely effected by damp.

The beautiful scheme of Edwardian stencilling which decorates the chancel has been largely untreated for the last century except for amateur interventions. Heritage Lottery Funding has allowed this much loved chancel to finally be treated, focusing on cleaning, stabilising and integrating losses.

Fig. 2 Losses to the painting expose an earlier scheme of red and black appearance

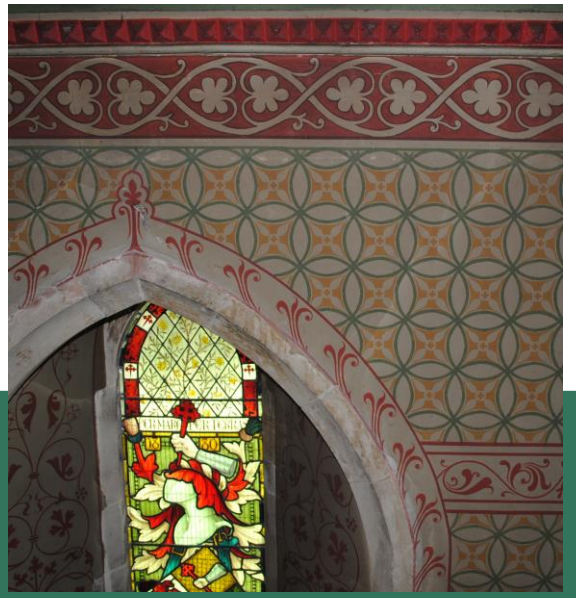


Fig. 3 Discoloration of the scheme before treatment

1.3] TREATMENT SUMMARY

In agreement with the client, a conservative approach of minimal intervention was selected for the treatment of St Peters using conservation grade materials and methods to ensure a sympathetic and historically appropriate restoration. Treatment was conducted by experienced painting conservators specialising in historic interiors with health and safety regulations strictly observed throughout the project.

Work was carried out following the erection of a fixed scaffold on two levels with the Chancel cordoned off from the public. Due to the interest in the project, pre-arranged tours and visits engaged and updated the Friends of St Peters and wider public to the Chancel Restoration and an additional blog posted on the St Peters Website was regularly updated https://www.stpetersprestonpark.co.uk/conserve-the-chancel

Treatment focused on the cleaning of the scheme, treatments to stabilise fragile areas of paint and plaster, and re-integration of losses with different levels of the scheme demanding different treatments. For example the lower levels presented greatest damage as a consequence to severe damp which had deteriorated the wall paintings when the church was closed at the end of the 20th C. Greater structural treatments were therefore required on the lower levels which had also been victim to poor restoration attempts and overpainting, presumably as a consequence of easy access to the lower areas.

Despite challenges, the restoration of the chancel was successfully completed in September 2018 with the substrate stabilised, losses integrated and scheme brightened to the original Edwardian scheme, exposing the colours originally intended. Fig 4, a photograph taken during cleaning treatment exposes the contrast between the cleaned and uncleaned areas of the scheme and to document treatment, a witness patch in the form of an untreated circle of the stencil detail has been left in the North East corner (Fig. 1). However, despite the successful treatment it would be recommended monitoring of the wall paintings is continued (refer to Monitoring Recommendations).

Fig. 4 During treatment of the North East corner

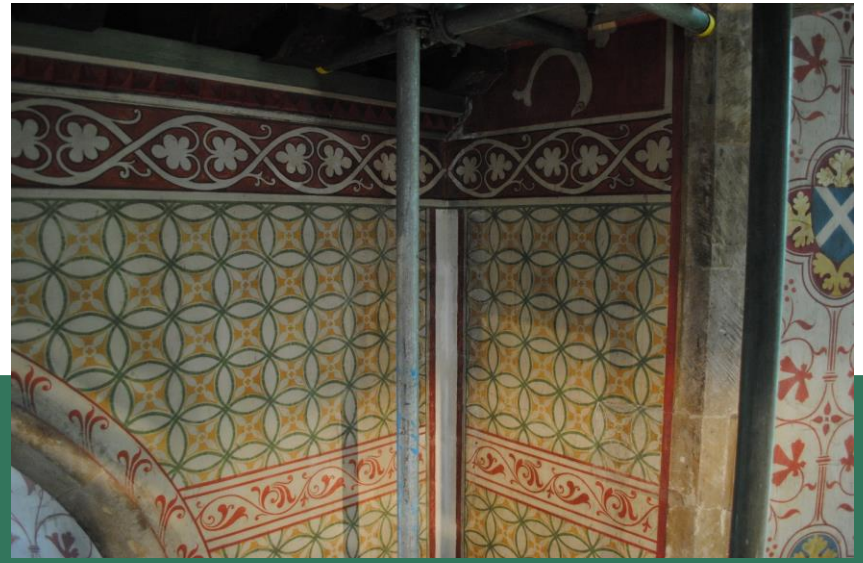


Fig. 5 After treatment of the North East corner

2] MATERIALS

Tools and Equipment

- Cotton Swabs
- Lint –free rags
- Vacuum
- Brushes
- Silicone release paper
- Japanese tissue
- Spatula
- Filling blades
- Sand paper
- Syringes
- Syringe needles
- Scalpel
- Stanley Knife
- Hand held drill
- Heated spatula

- Paint kettles
- Bottles with lids
- Polythene sheeting
- Low tack masking tape
- Disposal Bags
- PPE (Gloves, Respirator)

Chemicals and Materials

- Ammonium Carbonate $(NH_4)_2CO_3$
- Deionised Water
- Windsor and Newton Gouache Paint
- Flugger
- Hydrated lime
- Sand
- Lime Putty
- Trass
- Plextol B500
- Acetone

Fig. 6 Before Treatment of the South West

3] TREATMENT REPORT

3.1] SURFACE CLEANING

The first stage of treatment was to remove the extensive accumulation of loose surface dirt, dust and debris from the rafters and walls using soft bristle brushes and vacuum packs (Fig. 7). The gentle surface clean exposed the area of paint which were loosely adhered and therefore at risk of disruption during treatment, these areas were documented and addressed with primary importance. Areas of vulnerability can be identified in Fig. 8.

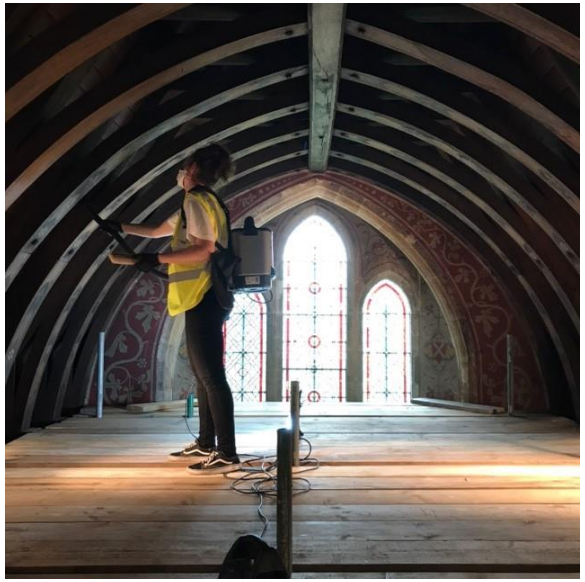


Fig. 7 Surface cleaning the rafters using vacuum

3.2] CONSOLIDATION

The areas identified to be at high risk of flaking were consolidated using the adhesive Plextol B500, applied with syringes where access could be gained behind the flakes, or with artists' brushes depending on the individual areas of concern. A poultice application using wetted tissue was used to secure the paint flakes in position prior to adhesive application to ensure minimal losses to the original scheme. Ideally, adhesive would have been applied following cleaning treatment however the mechanical action of cleaning would have caused losses to the scheme and therefore consolidation was prioritised in the vulnerable areas.

Fig. 8 Areas of loosely adhered paint and plaster in the South West corner

In addition to the application of adhesive, areas of raised paint were secured using a heated spatula to re-plasticise the paint lowering vulnerable lifted paint into level plane with the scheme. Further adhesive was applied where necessary and treatment proved successful in securing the vulnerable paint layer with minimal losses to the scheme.

Fig. 9 Consolidation. Application of adhesive through pre-wetted tissue membrane (left). Re- plasticising the raised paint using the heated spatula over protective layer of silicone release paper (right)

3.3] CLEANING

The substantial accumulation of dirt, soot, pollution and grime over the 20th Century has dulled the bright Edwardian scheme which decorates the chancel. Following extensive testing of a range of cleaning materials and concentrations, 5% Ammonium carbonate in de-ionised water was selected for treatment. Prior to treatment, all colours included in the scheme were tested to ensure the paint layer would remain stable throughout treatment. Testing exposed that all paints were stable however the reds were more vulnerable and addition care and monitoring was taken in these area. Cotton swabs were used to deliver the solution and with mechanical cleaning action, agitated and then remove the dirt layer.
Swabs were collected for safe disposal and the areas were cleaned with deionised water to neutralise remove any residues. During treatment, areas were carefully monitored to ensure no damage was being caused to the scheme. Treatment successfully removed the extensive layers of dirt and grime to expose a remarkable contrast to the scheme below (Fig. 13)

3.3.a] Challenges faced during cleaning

Previous Restoration

The green stencilled areas proved the most challenging aspect of the clean due to poor previous restoration attempts which had resulted in an uneven surface as well as an unsympathetic application of a dark green overpaint, presumably colour matched to the darkened green caused by layers of dirt as opposed to the original colour. With cleaning treatment, the darkened overpaint became more visible in contrast to the lighter original scheme underneath. Removal of the overpaint required the mechanical action of the scalpel which proved a pain-staking process.

Fig. 10 During cleaning treatment

Fig. 11 During cleaning treatment of the tree to the west chancel wall

Fig. 12 During cleaning treatment

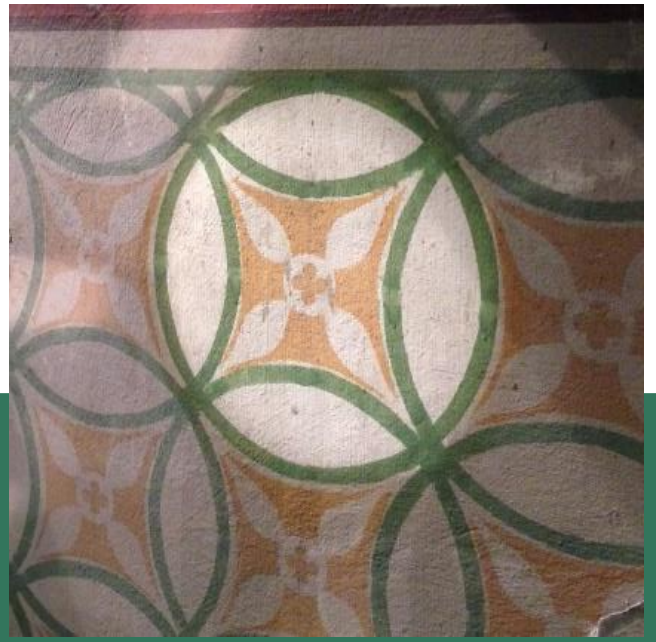


Fig. 13 The cleaned circle within the stencil exposes the contrast in colour against the surrounding dirt

Discoloured Drips

In addition to the challenges encountered in the lower green areas, an unforeseen outcome of treatment was revealed in the upper sections of the scheme. The removal of the layers of dirt and grime revealed an extensive series of dark drips/splashes on the wall paintings, most concentrated to upper layers, particularly the West Wall of the chancel and the windows above the alter. These particular darkened drip marks were unresponsive to ammonium carbonate, and due to their location, it was speculated that these drips could have been the result of varnishing/waxing of the rafters with the drips then trapping dirt on the surface, probably unnoticeable at the time.

To address the drips, acetone was applied with cotton swabs and swab sticks which reduced the impact to a minimal degree however following treatment traces were still present although to a much less dramatic effect than initially uncovered. The wall opposite the alter with the tree mural was most disrupted, probably due to the large surface area and the contrast with the darker drips, a further 2 days was spent to reduce the drips in this area. Where considered appropriate and necessary to reduce the visual impact of the drips, gouache was applied to encourage integration.

Fig. 14 West Chancel wall. Before Treatment

Fig. 15 West Chancel wall. After Treatment

3.4] FILLING

The filling treatment carried out included both minor fills to address and integrate paint losses as well as more invasive structural treatments. For the areas requiring minor fills following stabilisation treatments (consolidation and re-plasticising of the paint layer), Flugger® filler was applied to the losses in a fine layer using a spatula (Fig. 16). To isolate the filler, a layer of Plextol B500 was applied prior and post application. In addition, where appropriate, cracks were also filled with Flugger® however depending on the location of size of the cracks, some remained untreated based on the understanding that further cracks would be created in those areas in the future (i.e above the arch of the stained glass window at the East of the chancel).

However, more invasive structural treatment was required for areas with losses to the plaster and in areas which had bulged resulting in hollow passages behind the exterior plaster layers. Initial stages of treatment included the removal of loose plaster by mechanical raking out. A mixture of Trass (natural volcanic ash containing silica), hydrated lime and water was then applied into the structure using a syringe. The mixture forms a fine paste suitable for losses in the wall and also to fill any hollow pockets which would be vulnerable if left untreated. To address the hollow pockets, a hand drill was used to create minor holes in the wall (Fig. 18), into which the Trass Mixture could be applied (Fig. 18). Prior to application a syringe of de-ionised water was injected into the pockets to ensure adhesion and also to gain greater understanding of the pocket topography. Treatment applying the Trass was carried out in stages, mechanically encouraging the fill into the crevice's of the losses to ensure an even distribution of filler. Extreme care and caution must be observed during treatment to avoid excess filling which risks the stability of the painting by 'exploding' the plaster thus cracking the original scheme.

For larger areas which did not require injecting, a mixture of fine sand, hydraulic lime and deionised water was applied using filling blades (Fig. 17). The fills were sanded down and levelled into plane with the painting to ensure an even surface prior to image reintegration. Filling treatment proved succesful, using a selection of different materials and methods to respond to the unique demands of the chancel.

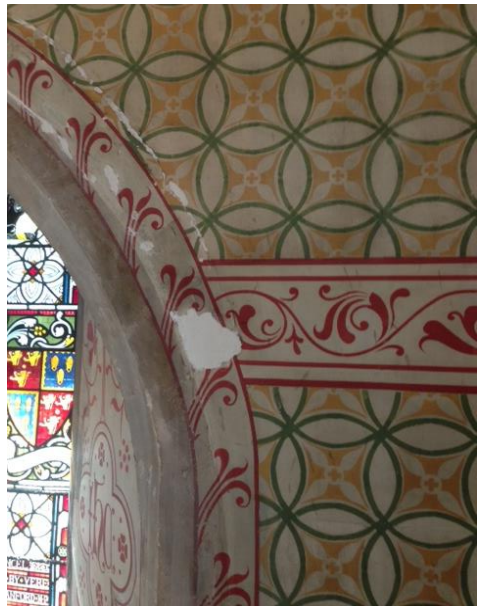


Fig. 16 Losses after filling with Flugger ®

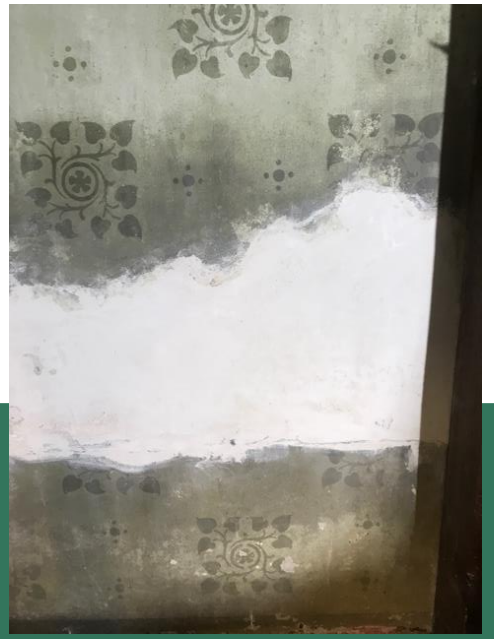
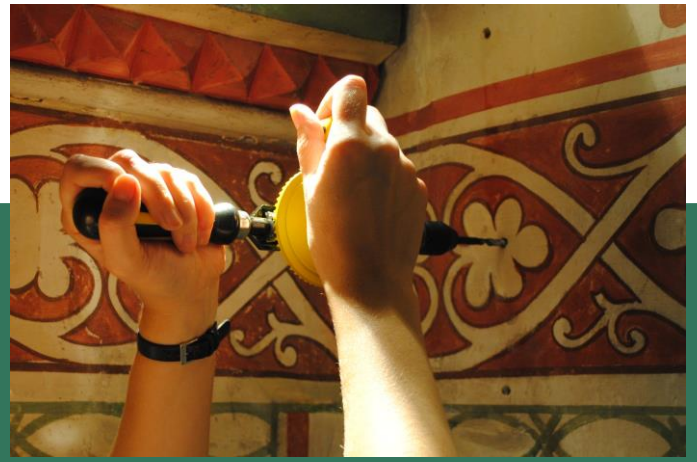


Fig. 17 Hydraulic lime/sand and de-ionised water before image reintegrating ®



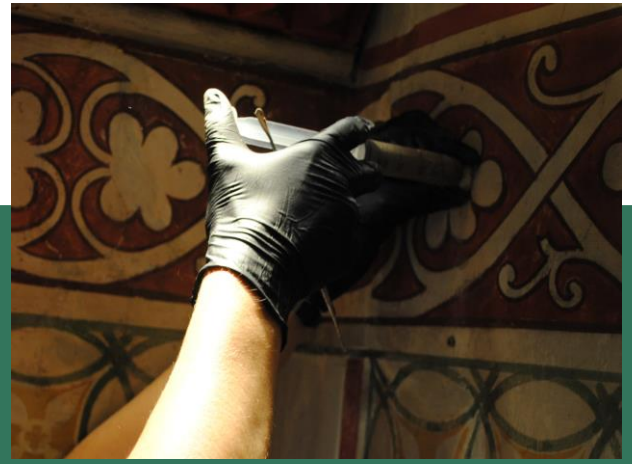


Fig. 18 Structural treatment filling the hollow pockets to the South West corner of the chancel . Drilling holes (left) filled injected with trass (right)

3.5] IMAGE REINTEGRATION

Following the application of filler, the fills were isolated using Plextol B500 prior to the application of gouache paint. Gouache was selected for treatment due to being water based and therefore reversible, stable, inert, with superior matt properties and excellent coverage. Colours were mixed in situ and applied to integrate losses of the scheme.

In the filled areas of the lower green sections a series of washes were applied as a base coat. In addition, the red border at the base of the scheme was reinstated as was the darker green stencilled detail, areas of which had been lost as a result of the extensive damp caused to the chancel. A tracing had been taken from the original scheme with a stencil made to ensure the original methods of application were followed during treatment. Additional areas were retouched using a brush (Fig. 20).

Fig. 19 Uneven surface prior to treatment

Fig. 20 Application of Gouache paint to integrate losses

Fig. 21 Before treatment (top)
After stencilling (below) reintegrating the original scheme

HISTORIC STENCILLING

Interestingly, upon closer inspection a previous stencilling scheme can be identified in St Peters; both as a faint print in the cleaned green background and also behind the altar (Fig. 22). Although similar to the stencilling in situ today, the previous stencil presents a more rounded scheme as opposed to the square detail identified in Fig. 21.

It appears that the scheme identified in Fig 22 was the original chancel stencilling of 1878 with the scheme today being painted in 1906 following the fire

Fig. 22 Suggested original stencilling scheme from 1878

4] FUTURE MONITORING RECOMMENDATIONS

Although the issues associated with damp ingress have been addressed prior to Hare & Humphreys' work, it would be recommended that the chancel is monitored for water ingress from the external walls with particular concern over the South wall which has previously suffered severely. Recording damp levels and documenting the condition of the church would be recommended on an annual basis to ensure measures can be taken to prevent further damages.

Fig. 23 After Treatment

Fig. 24 Before Treatment. South West corner

Fig. 25 After Treatment. South West corner