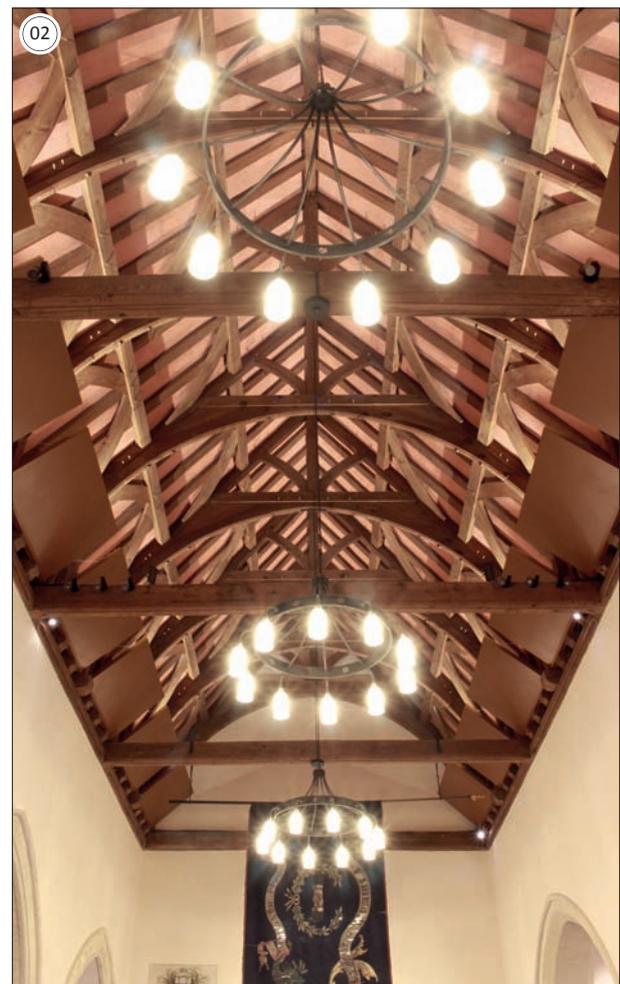


PROJECT



CHALGROVE ST MARY — LIGHTING DESIGN

by Bruce Kirk
Light Perceptions

Lighting the nave and aisles

The new lighting in the nave and aisles of St Mary's is provided by a set of bespoke pendants, designed in an Arts & Crafts style by Light Perceptions and fabricated by Michael Jacques, a well-known local metalworker. Using dimmable LED light sources, they provide a warm and rich coverage of light across the nave and aisles. Four large, 10-light pedants hang along the central line of the nave whilst there are 4-light fittings in the north aisle and single shades in the south aisle. The sizes of the fittings are proportioned both to the volume of the three spaces and the need to provide an even flow of light across the entire width of the interior of the nave and aisles.



The decision to position the main pendants on the central axis of the nave rather than having two rows of smaller fittings (replacing the previous hanging lights which combined both light and heating elements) was influenced by a number of factors. Firstly it had long been the intention to heat the central space of the church with some form of radiant heating system positioned at the top of the nave wall plates and it was obviously desirable to keep the pendants and the heaters a good distance apart. It was also felt that, with both aisles also being lit by pendants four fittings across the width of the church might appear too much of an intrusion into sightlines; the central position in the nave also allowed these fittings to be



- 01 The principal light source in the nave is a set of four 10-light pendants
- 02 The nave ceiling with uplights between the heating panel
- 03 The font, with the south aisle in the background
- 04 A single light pendant in the south aisle
- 05 The north aisle
- 06 The chancel with the Mediaeval wall paintings highlighted
- 07 Part of the chancel lighting system

PROJECT TEAM

Lighting Design:
Light Perceptions

Bespoke Lighting:
Michael Jacques

Chancel Lighting System:
Mike Stoane Lighting

General spotlighting:
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Uplights:
Radiant Lighting

Lighting Controls:
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Photography:
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Installing Contractors:
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hung somewhat higher, increasing the sense of height in the nave.

In addition to the pendants there are decorative uplights, positioned between the heating panels, which highlight the upper part of the timber ceiling structure. As well as being a very attractive feature of the church this focus also helps to draw the eye away from the heating panels themselves.

Spotlighting for the key liturgical features is positioned on the three tie beams providing subtle, and individually controllable accents to the font, lectern, pulpit and chancel step as well as additional reading light for choirs and musicians.

Lighting the Chancel

The lighting design for the chancel underwent a number of changes over a lengthy period of time with the wall paintings always being at the forefront of the design brief. The earliest scheme involved a simple floodlighting approach with a small number of wide angle fittings, located on the timber paneling above the paintings to provide a wash of light across the chancel to the paintings on the opposite elevation.

Ideas then formed of a more precisely focused system where individual sections of the story could be highlighted to enhance interpretation and understanding. However at the time the engineering requirement was such that the size and number of the fittings and the sheer amount of cabling required to control them represented far too much of a visual intrusion into the space that the benefits of the system could not be justified. The design reverted to a much simpler approach.

After a lull of a few years in the design process, an initial application to the Heritage Lottery Fund to aid the interpretation of the paintings was successful. This yielded sufficient funds to consider a more sophisticated system. After tests of a number of prototypes, it was found that by using digitally addressed LED chips in very small spotlight fittings, it was possible to accommodate all of the cabling and control equipment in a specially designed slim profile extrusion suspended from the timber ceiling on thin steel wires.

The result is a system where each element of the story can be individually illuminated by a dedicated spotlight fitted with one of a number of lens options to control the beam spread and relative intensity for each detail.

A preprogrammed control system allows not only for individual illumination of the paintings but also a simple-to-operate lighting sequence where the unfolding story is illuminated chapter by chapter by pressing "forward" and "back" buttons. In addition to the lighting of the paintings the new system also provides accent lighting to the sanctuary and altar with separate lighting for the choir stalls. The chancel scheme is completed with uplights positioned on the window cills that illuminate the paintings within the window reveals and cast a soft wash onto the timber paneled ceiling above. ■

