St Stephen's Prenton

Project 125

A Statement of Significance

Statement of Need

in respect of mounting AV System Relay Screens to pillars

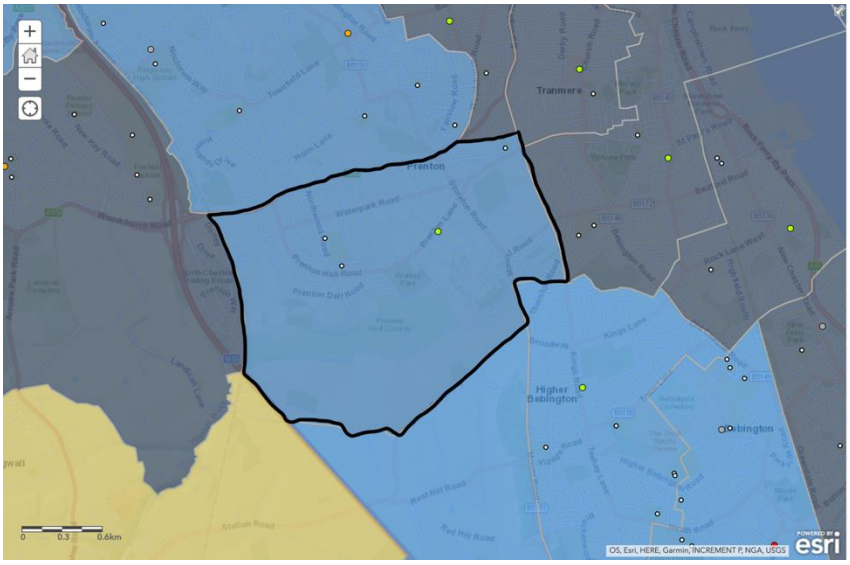
18 July 2024

Statement of Significance

1. Church Setting

Prenton Parish is a suburban parish on the Wirral Peninsula within the Deanery of Birkenhead. There are a variety of areas within Prenton Parish, ranging from leafy roads and open spaces to narrow streets and busy thoroughfares. The parish profile almost directly conforms to the Ward of Prenton, a ward of just over 9,000 people. The parish has distinct areas of diverse housing provision from terraced housing, to large, detached properties and medium-rise flats.

Prenton has no real "centre" and the church is not near to other social features in the area. It is, therefore, not particularly well known locally, although the church halls are used for various community activities, and birthday parties etc.



Source: Church of England Research & Statistics unit (amended to highlight Parish boundary in black)

2. Description

St Stephen's is an attractive sandstone church constructed in the Gothic Revival Style, with a parking area at the front, sloped lawn to the rear and church halls on site. The church building's internal walls are brick and the roof is tiled. It was built in two phases – the first in in 1896-7 and the second in 1908-1909. The building consists of a nave, north and south aisles, the chancel, a Lady Chapel and vestries. There were plans to add a tower and a spire at a later date, but this was never completed. There are grounds but no graveyard.

The church was designed by a celebrated Liverpool architect Charles Deacon, and an architectural description of the church for the Liverpool Branch of the Victorian Society described it as "a building of much quality and interest [which] must be considered to be Charles' Deacon's masterpiece". The stained glass in the east window is in the form of a war memorial and dates from 1926.

Extensive work to carry out restoration to this window was completed in 2015. There are a number of other stained-glass windows including several smaller windows depicting the saints and a modern Millennium window. Four windows were designed by a notable artist of the Arts and Crafts Movement, Trena Cox. Two of these windows are in the Lady Chapel. The reredos, altar, stalls and pulpit are carved in wood.

In recent years the inner door has been replaced with a glass door to make the interior more visible from outside.

3. Interior

The interior as seen below is hard red brick inside with stone detailing; and wood block floors on concrete (with aisle and sanctuary carpets). As visible below, the bulk of chairs are a mixture of deep red/wine upholstery, picking out the red of the brickwork. The older wooden stock has recently been updated with more deep red/wine upholstered chairs, but in a lighter, stackable and more flexible design.

The seating in the north and south aisles, has visibility to the sanctuary steps and carpeted area immediately in front, restricted by the pillars. The single central AV screen, installed several years ago, was supplemented during Covid when it was necessary to spread people out as much as possible. This was done in a temporary manner, using TVs on wheeled stands, with cables run above ground and taped down to reduce the risk of trip hazards.

A previous List B request (see Appendix A below) was submitted in order to update an existing under-floor cable channel across the nave allowing for cables to be routed without causing trip hazards.

B. Statement of Need

SCHEDULE OF WORKS PROPOSED

To update our two side-aisle relay screens by mounting them to the first pillar on the left and right of the building, via wall-mounted brackets and routing cables up the back of the pillars to a height that improves sightlines and eliminates the risks of trip hazards or hitting heads.

INTRODUCTION AND BRIEF HISTORY

As part of our 125th anniversary plans (1897-2022), a PCC sub-committee undertook to make sure that the Parish oof Prenton had a building which was **purposefully friendly and fit for purpose**. Plans were disrupted considerably by Covid. So far been able to progress with the glazing our lady chapel: increasing its sense of privacy and intimacy for smaller services, as well as reducing heating costs, and allowing for greater flexibility in the use of the space.

We are currently undertaking an accessible loos and servery phase, to enable us to offer an inclusive and hospitable welcome at services and other events.
Another aspect of the original statement of need, was to update as necessary systems such as lighting, heating and AV provision.

The Project 125 committee stated the following intention: **To enhance the visual aids for larger church services, enabling people sitting in the side aisles to see the 'screen' and leader. System should support both live video feed of the service leader and the main PowerPoint/other visuals (e.g. recorded video).**

CONSIDERATIONS & NEEDS

1. Maximising screen visibility

Since Covid when we attempted to spread people out as much as possible, we've had two additional TVs serving the side-aisles where view to the central projector screen is inhibited. This set up also allows visibility to screens when the building is at maximum capacity, e.g. special services like remembrance Sunday and school visits.

2. Wear and tear, compatibility and compliance

We currently experience various compatibility issues between our the laptop, projector and TV screens, due to the ad-hoc nature of the systems development. Older tech VGA cables connect the side aisle TVs which reduces image quality significantly over a certain distance. Newer laptops do not export to VGA. One of our TVs (on the longest cable run) has a very faint image. The second TV is only working intermittently. Compatibility issues particularly spike when we have school groups in, using laptops with only HDMI outputs.

Compliance: Our projector also has an old-style lamp fitting which is becoming obsolete. Laser projectors are replacing this old technology. A replacement projector will also introduce complications around VGA/HMDI connectivity and compatibility.

3. Health and safety factors

The current side-aisle TVs are cabled around the whole front of the building (including across the sanctuary steps etc) introducing trip hazards in a couple of places. The proposed updated floor-channel (still awaiting approval from the DAC), and will help with this. The TV trolleys on the lectern side also introduces a trip hazard.

4. QI Report

Graham Holland, our inspecting architect has also previously noted in QI reports the need to address the surface run wires resulting from our attempts during Covid to keep people safe and well-spaced whist enabling them to access material on the screens.

5. Precedent

Examples can be seen in the images below of existing bracket fixings (e.g. Sound system Speakers). See comment on architects approval following the images and diagrams.

OTHER CONSIDERATIONS

We have considered various options for the location and mounting the screens. A temporary solution is possible whereby the bracket is strapped to the pillar, not fixed. This allows for their easy removal or adjustment of exact height. The screens could be stand/trolley mounted (more expensive) and either positioned by the pillars, or by the north and south aisle external walls (See location B highlighted on the annotated architects plan below), thus reducing the trip hazard. Our preference is to mount as per this faculty.

PCC RESOLUTION

From business transacted by email, to be reported to PCC at our July meeting, Thursday 18th July. The following resolution was passed:

'In order to update and integrate the church visual system and make it fit for purpose (safe, reliable and compliant), the PCC approves a budget of up to £8,500 (including VAT).'

The resolution was to approve the following AV updates proposal: **Replacement 40" Relay Screens.** Approx £200 each x2. To ensure visibility for the side aisles. As we use these weekly, I'm leaning towards fixing via a bracket, rather than free-standing. This is cheaper and also fully eliminating trip hazards. Screens can be mounted higher than we currently have them to maximise sightlines. I have emailed the diocese for some informal faculty advice. There is also a cost saving for brackets over stands/trolleys.

INSPECTING ARCHITECT EXPLANATORY DIAGRAMS, IMAGES AND BUILDING PLAN

The following images show our current temporary covid solution, and the proposed update to mount screens on pillars, with cables routed discreetly up the backs of the pillars, away from the congregational sight.

Figure 1. Current 40" screens on stands – left and right-hand side.

Surface level-cables and trolley feet act as trip hazards we would like to avoid.

The screens are also not at optimal height, especially for when the congregation is standing.

The screens also take up some seating space and the corners are painful if you stand up underneath them.

Figure 2. Proposed pillar mounted locations

Facing the front, x2 two relay-screens mounted on 1st pillar angled out to face side-aisle blind spots.

Screens would be angled out towards the side-aisles in order to maximise visibility.

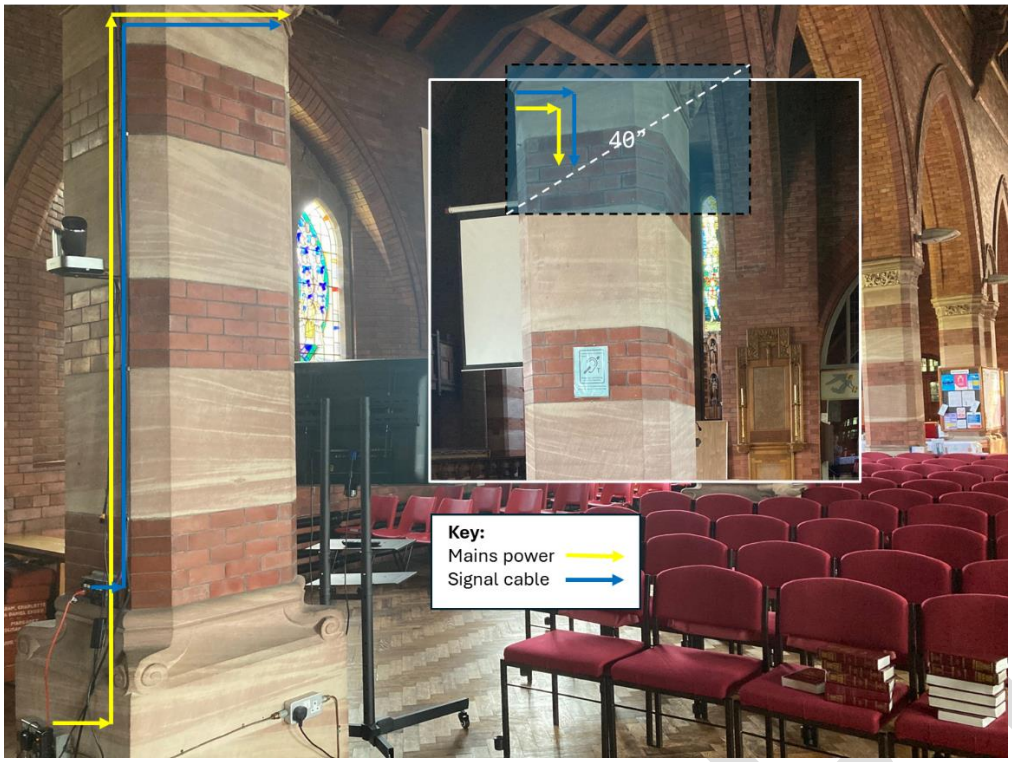
The proposed brackets allow for folding away flat or facing inwards for alternate seating styles (e.g. our monthly evening Café Service).

Figure 3. Close up Right and left-hand pillars with proposed location

Screen mounted at a height maximise sightlines and eliminate risk of bumping heads.

Arrow shows primary angle of screen to left and right.

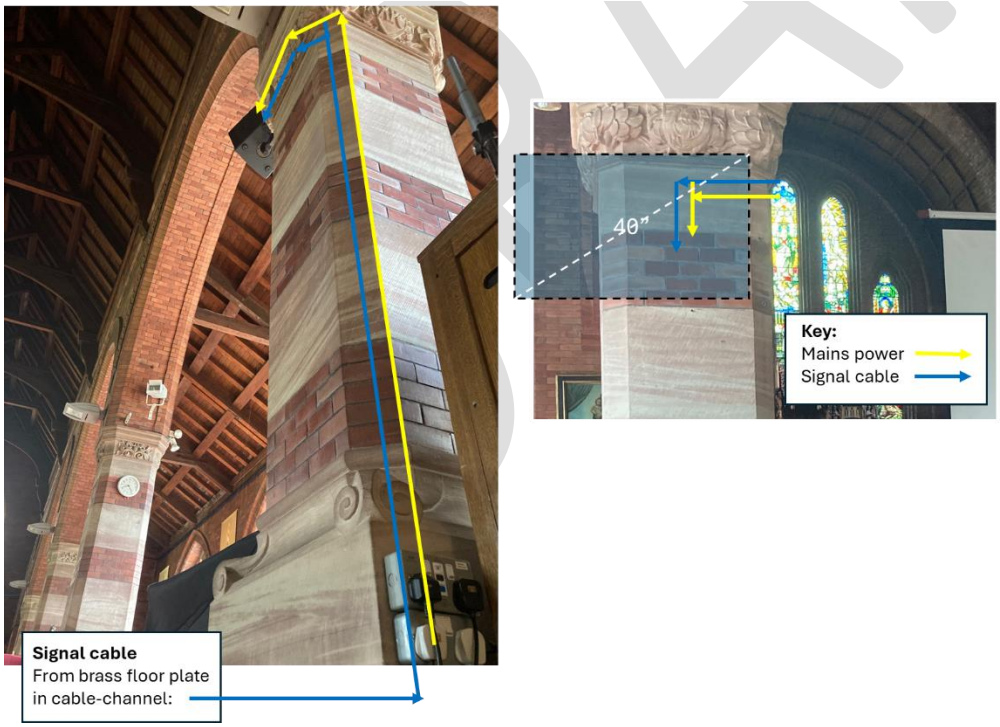
Figure 4. Cable-routing for right-hand screen



Mains power and HDMI signal would be routed up the rear of the pillar, and discretely around the lip to the mounting bracket.

Insert shows front of pillar and cable route to back of screen.

Figure 5. Cable-routing for left-hand screen



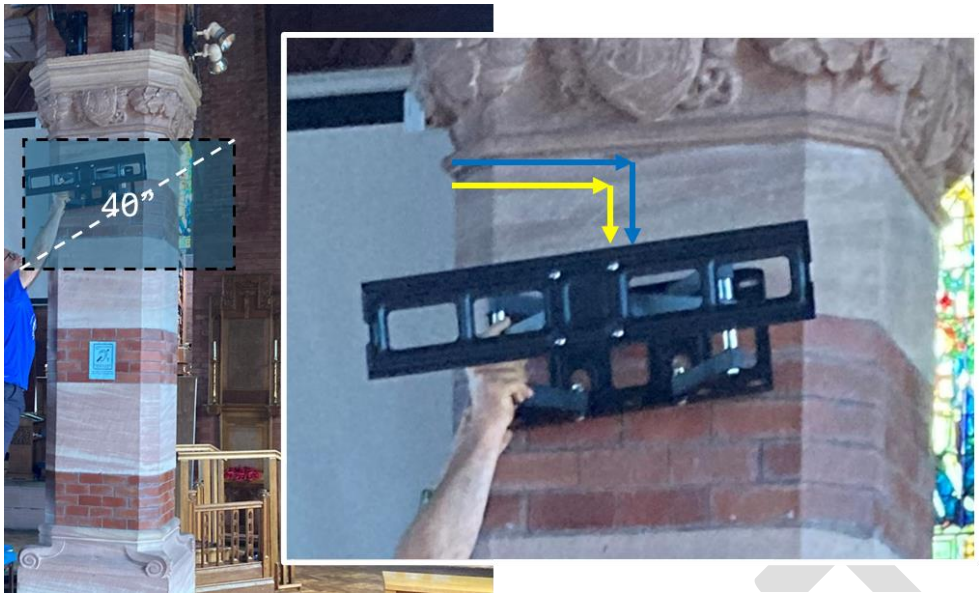
Mains power and HDMI signal would be routed up the rear of the pillar, and discretely around the lip to the mounting bracket.

The signal cable would come across the nave in a cable channel, with the cable exiting the channel the foot of the pillar.

Insert shows front of pillar and cable route to back of screen.

See Appendix A, copy of List B approved cable channel.

Figure 6. Example screen mounting bracket, with cable routing.



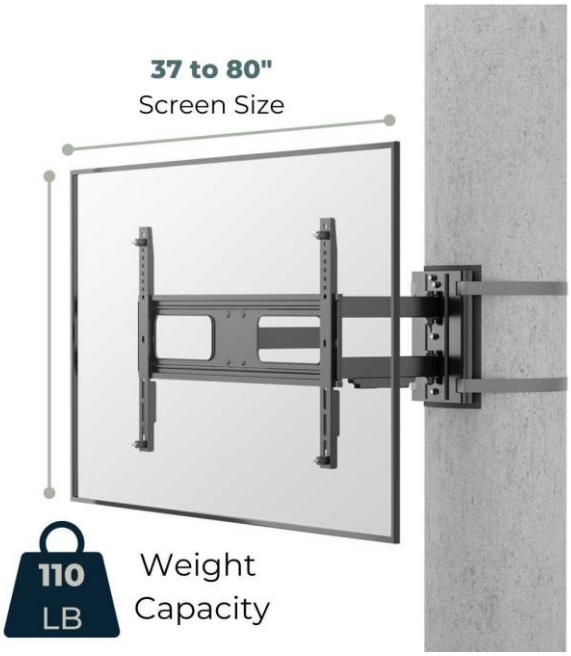
Bracket tilts left/tight, extends out on scissor arms, and can be tilted forward.

Figure 7. Alternate temporary strap mounting

In another church we have seen a solution whereby screens are mounted without permanent fixing. This has one the advantage of being able to confirm the right height/position for the screen before committing to fixing a bracket It is obviously not as safe as a fitted bracket properly rated for the weight.

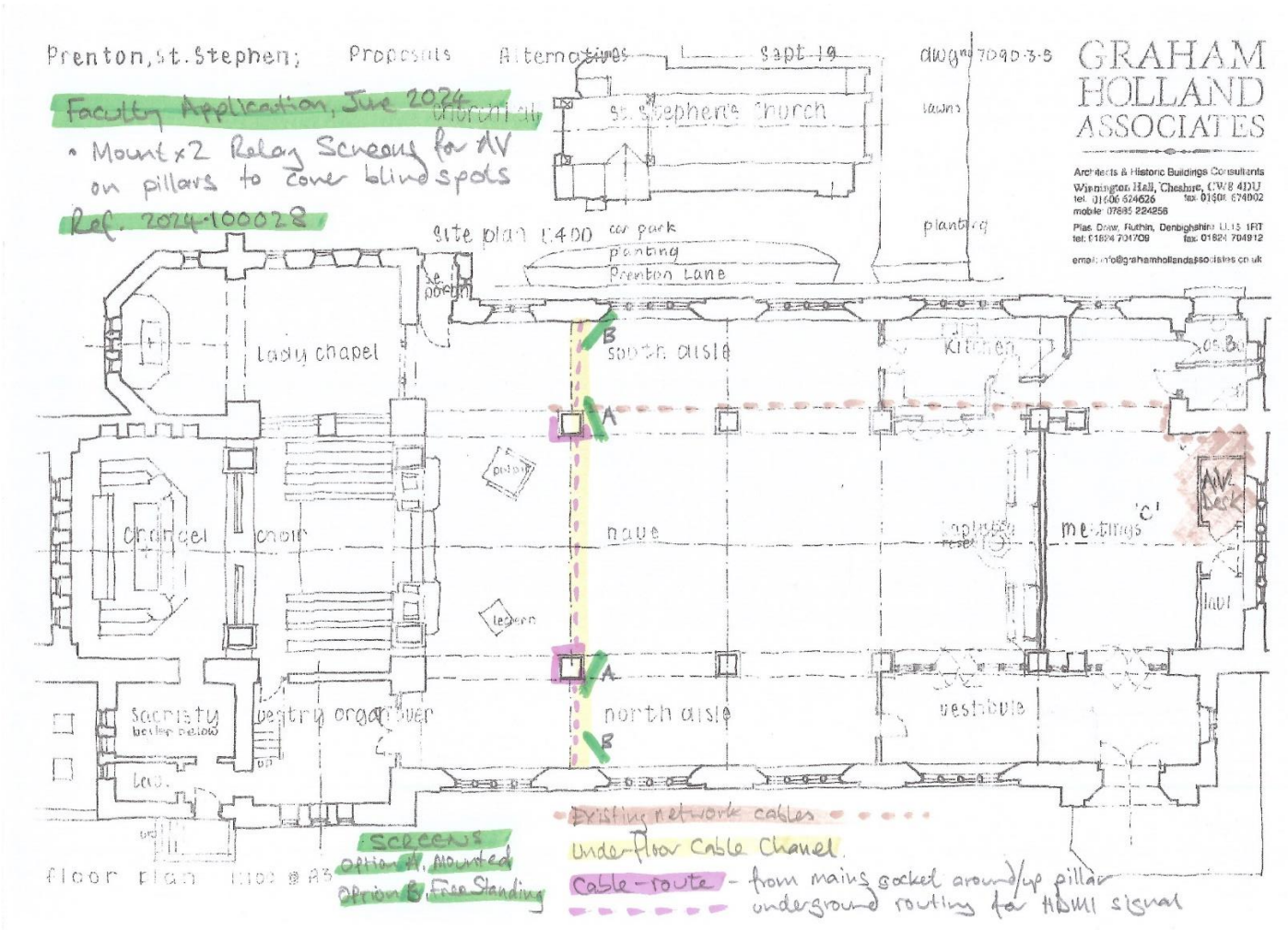
There are versions of this approach on the market which use metal straps, rather than ratchet traps.

Temporary solution



Professional Pillar Mounting

Figure 8. Marked up plan of St Stephen's Prenton
Showing cable channel, proposed bracket mounting position A (also alternate B position for Screens on stands).



Architects Approval

Our inspecting architect, Graham Holland, has been consulted. Email reply below*, and at an on-site meeting on 18/7/24, Graham confirmed that he was fully supportive of the proposal, with the following restrictions/recommendations:

- Brackets are secured into the joints of the brickwork, avoiding the brick facings themselves.
- Avoid the stonework
- Use of non-ferrous fixings
- Discreet routing of cables via the rear of the pillar (as proposed above)

* I would be happy to support the up-date of the projector system. Care would be req. with positioning & fixing. An on-site assessment is required.

Appendix A

List B1-1 Application: Existing cable channel improvements

Approval received 26.06.2024.

Introduction

Across the width of St Stephen's, in our woodblock flooring, there is a section not set out in the traditional zig-zag formation. Instead they traverse the width of church with two rows of single blocks set end on end in a line, with a row at 90 degrees in the middle.

At some point in the past, a section of the end-to-end line of blocks has been carved away to create space for a pyro electrical cable, an induction loop wire and two audio system cables. On the left hand-side of church a larger audio cable runs through a larger cut out to the edge of the building, before being routed to the sound desk at the back.

Graham Holland, our inspecting architect has previously noted in QI reports that some of the blocks need resetting so as not to be a trip hazard. These are predominantly the ones sitting proud due to cables beneath.

Statement of Need

We are also finding that with the wooden blocks moving on top of the cables, we have lost the use of the two microphone sockets because of cable damage.

The PCC has approved a plan to put this right, effectively doing the same thing, but doing it properly. Instead of the cables running on the concrete floor with wooden blocks sitting on top, to run them through an appropriate conduit or trunking below the blocks.

Over all, the end result will be better/safer fitting blocks. Plus a safe cable route across church which replacement audio cables can run through. The electrician proposes running a sections of 50x50mm plastic conduit under the woodblock, set in a recess in the concrete below, so that the parquet wood-block flooring can be secured flush on top. We propose to insert x4 flush brass floor plates for trip free access. When not in use any surface cabling can be hidden from view.

Future Proof

We intend to leave a draw-string in place, for new cables to be pulled through without lifting the flooring in future.

Improved Aesthetics & Health & Safety

A final benefit is that at present various wires run above ground, for various reasons i) damage to the microphone cable caused by the moving woodblocks, ii) to enable a TV on a stand in the side aisles for larger services (e.g. remembrance Sunday/carol services), iii) and for livestreaming in post covid times where we have adapted the AV system on the go to meet pastoral needs. Training wires were also picked up in a recent QI report. The intention of the channel is to eliminate this, with cables all routed through the conduit. This was obviously the original intention, but just not executed very well!

PCC Resolution
From minutes of our September 2023 meeting, held on Thursday 21st September.

5. **Vision Focus**

   a. **Build** – Project 125, including:

      i. Lady Chapel update: as report. Noted that the cross has been put back the wrong way. Roses on glass are at the legal height for helping people to notice glass and not walk into the glass door. Monitor if it's an issue.

      ii. AV updates (see attached quote for cross church cable channel): Do we need a faculty? – the channel is already there, just in the wooden blocks. We are proposing to run the channel through the concrete under the wooden blocks. Blocks will be fixed back in place with a draw string to be included that will draw new wires through without having to remove carpet/blocks etc. This was proposed by Joel Giblett, seconded by Daniel Davies and we were all in favour.

Architects plan
The highlighted green line shown the proposed route of the cable conduit. The red circles indicate the location of the flush brass plate access points.