Notes for Project Meeting, 13th October 2025

Theatre Curtains

I was disappointed to find that the overall budget of the revised quotation had risen by nearly 50%.

However, our later decision to eliminate theatre curtains from the plan has effectively removed this cost from consideration.

Blue Bricks

The bricks we need are still being made by Red Bank based in Measham. We can purchase them through E M Smith, based in Coventry. There is no minimum order – so we can buy an exact amount of each type. Depending on what coloured bricks they are manufacturing, the lead time is between 4 and 8 weeks. Cost not more than £20.00 per item – depending on shape.

Carpets

Despite following up with multiple suppliers, the only quotation received to date has been from Midland Carpets and Flooring. Their quote is made up of the following:

Winter zone and main isle 10,183.85 plus VAT

Side isles 593.93 plus VAT

Heritage zone 3,950.43 plus VAT

New rooms 2,296.29 plus VAT

Small vestry and corridor 1,392.23 plus VAT

Total labour 1,558.50 plus VAT

Totalling £18,426.52 plus VAT.

Due to the decision not to proceed with the proposed alterations to the front of the church, the originally quoted carpeted area—costed at £10,183.65 plus VAT—may now be substantially reduced.

Removing the 'Wet' heating system and the storage heaters

Two companies attended site, but only Palmers Plumbing and Heating provided a quotation, totalling £3,747.50 plus VAT. Based on their approach and communication, they would have been my preferred contractor anyway, as the other company demonstrated a rather aggressive stance in their customer service.

System Controls

HeatinGlobal Ltd visited site on 18th September 2025. They are a company that specialise in church and large commercial building heating systems. Their quotation has not yet arrived.

Asbestos

Samples were taken on the 19th September 2025 from the following positions:

- Blue section of false ceiling
- White section of false ceiling

- Brown section of false ceiling
- Boarding at back of church above balcony
- During inspection of the heaters located at the rear of the church, we removed the front panel casing for sampling and discovered a nameplate indicating the unit was manufactured by Bibble, a local company based in Nuneaton. Upon contacting them, they could not confirm the situation as the heater is so old, but they know that in some of their early models, asbestos may have been used in the filter area so this area was chosen for the sample position.
- The material between the joints in the external downpipes
- Re-testing of internal floor tiles and the compound used beneath it.

The samples were sent away to a certified laboratory for testing, and they reported that **ALL** samples were free from asbestos.

Electrical Engineer

Prime Electrical Services Ltd

Lawrence visited church on 19th September 2025.

We reviewed our plans in detail and presented the calculations I had conducted concerning both kilowatt (kW) and ampere (A) requirements. Together, we examined the load assessments to ensure accurate estimation of current and future electrical demands, helping to prevent circuit overload. We also discussed appropriate cable sizing, considering factors such as voltage, current, temperature ratings, and environmental conditions.

For the single-phase system, we plan to implement standard Ring Final Circuits (RFCs) rated at 32A, each capable of serving up to 100m² of floor area for the heating plan.

While an unlimited number of socket outlets can be installed on a ring circuit, the total load must remain within the 32A limit. To ensure safe and efficient operation, we considered the Diversity Factor, recognising that not all sockets will be operating at full load simultaneously. We also reviewed the circuit distribution strategy, allowing the 100A supply to be split across multiple circuits. Each ring will be designed to support no more than 20 socket outlets, subject to layout and usage requirements.

We considered the application of the 80% Rule, which advises that for continuous loads - defined as those operating for three hours or more - only 80% of a circuit's rated capacity should be used. For example, a 20 - amp circuit should be limited to a continuous load of 16 amps. This precautionary measure helps mitigate the risk of overheating, nuisance tripping, and potential damage to equipment.

I created a spreadsheet that outlines each electrical unit within the church and vestry, along with how they are managed on the fuse board. The only area I am not sure about is the library and the corridor. For our 'standard' service the maximum current draw would be ~73A – against our 100A input.

For the handful of services each year - typically around five - where we need to operate the second set of 20 underpew heaters, I've calculated a worst-case scenario. The theoretical maximum current draw would be ~93 amps—just below our 100A supply threshold.

The absolute maximum – if everything we had was switched on at the same time – is ~128A

Initially, Lawrence believed we had ample capacity available. However, after walking through the building and reviewing the data, he acknowledged that our calculations closely reflected the actual load conditions and agreed that control measures should be considered.

Other comments that he made were:

- 1. Based on his previous experience with combined infrared/light units like those we are considering for the rooms beneath the balcony he advised against their use, noting unsatisfactory performance. He recommended retaining the existing lighting setup and, within his quotation, will propose an alternative electrical heating solution that he believes would be more effective.
- 2. He would like to split the church into four control areas:
 - Winter Zone plus Church Room
 - Pew Zone
 - Weekday
 - Vestry
- 3. Instead of utilising SMART sockets, he recommended routing the heating elements into a dedicated new fuse box. He believes this approach would deliver improved overall system performance, as it allows for grouping all controllable components particularly those requiring external control options without the need to reconfigure the existing fuse board.
- 4. He would change all our lighting to LED's which we now must do with the 12 main church lights, as in my initial calculations, I thought were already LED's but are in fact halogen and the increase from 100W to 500W potentially takes us above the maximum for the 'worst case' single phase calculation.

We are waiting for his quotation.

Pawson Electrical Services

Lee visited site on 1st October 2025. Their address is Navigation Cl, Coton, Nuneaton

We are waiting for his quotation.

KES Electrical Systems

Zac visited site on 1st October 2025. Their address is Church Road, Hartshill. They have recently taken over the works in the Community Center, and Olwyn rates them highly.

We are waiting for his quotation.

Electrics Part 2

All three companies have confirmed that our maximum loading would be around 90 amps from their visits.

I want to look at ways to ensure we never exceed 90 amps on our single-phase 240V, 100A fused supply.

I think we will need to consider implementing electrical load management and protective devices. Here are our main options:

1. Install a Current Limiting Circuit Breaker or Overcurrent Relay

- Use a **circuit breaker** rated at 90A instead of relying solely on the 100A fuse.
- Alternatively, install an overcurrent protection relay that trips at 90A.
- These devices disconnect the load if current exceeds our set threshold.

2. Use a Load Monitoring System

- Install a current transformer (CT) and energy meter to continuously monitor current draw.
- Connect this to a programmable logic controller (PLC) or smart relay that can shed loads or trigger alarms when nearing 90A.

3. Implement Load Shedding or Priority Control

- Divide our loads into **priority groups** (essential vs non-essential).
- Use **contactors or smart switches** to disconnect non-essential loads automatically when current approaches 90A.

7 4. Limit Total Connected Load

- Ensure the **sum of all connected appliances** does not exceed 21.6 kW (since 240V × 90A = 21,600W).
- Use manual or automatic scheduling to avoid simultaneous operation of high-power devices.

🐒 5. Programmable Power Controller

- Devices like **smart energy controllers** can throttle or disconnect loads based on real-time current draw.
- Some models allow you to set a hard limit (e.g., 90A) and will actively manage usage to stay below it.

David Poultney

David, our Area Dean, plays a key role in enabling access to most of Coventry Diocese's funding streams, as both his support and signature are required for applications. He visited site on 23rd September 2025 and met with Nick M and myself. I am pleased to report that he has expressed that he would fully support any proposals we are putting forward.

Digital Drawings

Lucion Group visited site on 24th September 2025. Prior to their visit I contacted Steve Matthews – our church architect - to ask what format he would like the drawings to be in. He requested a .DWG extension.

We had a bonus – the person who visited had just had his licence to fly a drone, and he needs hours flown to keep his accreditation. He kindly came back and did a survey of the tower and the roof tiles FOC. I have sent Steve Matthews access to these drone photographs – should he need them. Having looked at blown up sections of the photographs sent, it would appear that the works identified on the church tower in our recent 2023 Quinquennial Report may not be required.

We are waiting for his drawings to arrive – which will be in both a digital format and printed out.

Men's and Women's Shed

I have already produced a note on my visit to their two sites in Nuneaton.

Subsequently, their committee visited church on 24th September 2025.

We went through our plans both internally and externally. They have gone away to look at ways to engage with the community to better judge local interest, and we are to meet again with them in early November, after they have consulted with their members in late October.

Structural Engineer

Nandini Ponnusamy, from J M S Engineers visited site on 29th September 2025.

The report – when it arrives – will identify each crack and gives a recommendation on how each should be dealt with.

The report will make it clear what works are required.

Verbally, at the end of her visit, Nandini told me that, in general, most of the internal cracks can be easily remedied, as they are purely plaster cracks.

However, the south-east corner of the church building is of concern and she is minded that the cracks in the corner of this building are directly connected to the adjacent tree.

If this is the case, the remedial options are:

1. Root Barrier Installation

- Install physical barriers underground to redirect root growth away from the foundation.
- Best for cases where the tree is valuable and the damage is minimal.

2. Selective Root Pruning

- Carefully remove offending roots without destabilising the tree.
- Must be done by a qualified arborist to avoid killing or toppling the tree.

3. Foundation Underpinning

- Strengthen the compromised section of the foundation using concrete piers or steel supports.
- Effective for restoring structural integrity without removing the tree.

4. Tree Removal

- If the tree poses a long-term threat and alternatives are not viable, removal may be necessary.
- May require permission from local authorities, especially if the tree is protected.

5. Soil Moisture Management

• Tree roots often exploit dry soil near foundations. Installing irrigation or improving drainage can reduce root intrusion.



From the Tree Risk Survey Report, the tree is a sycamore tree.

Sycamore trees have a **large, aggressive root system** that can pose challenges near buildings and infrastructure. Here is a breakdown of their root characteristics:

Sycamore Tree Root System Overview

1. Root Depth

- Typically reaches 3 to 5 feet deep, depending on soil conditions.
- In well-draining soils, roots may penetrate deeper to access groundwater.

2. Lateral Spread

- Roots can extend 15 to 25 feet outward from the trunk, often beyond the tree's canopy.
- This widespread makes them prone to interfering with foundations, pathways and pipes.

3. Structure

- Young sycamores develop a strong taproot for anchorage.
- As they mature, the taproot gives way to a shallow, fibrous root system that spreads horizontally.

4. Adaptability

- Sycamores thrive in moist, loamy, or sandy soils, especially near rivers and floodplains.
- Their roots stabilise soil and prevent erosion, making them ecologically valuable.

5. Potential Issues

- Roots can lift pavement, crack foundations, and clog drains.
- Their shallow nature makes them vulnerable to drought and compaction.

Management Tips

- Avoid planting sycamores within 30 feet of buildings.
- Use root barriers to redirect growth away from sensitive areas.
- Regular inspections and **root pruning** (by a certified arborist) can help mitigate damage.

I have approached a couple of companies – one based in Coventry - who advised that we may have an insurance claim. Both companies only do this kind of work for insurance companies.

I asked Nandini if she would have a look at the drone photographs of the south facing tower wall and make any observations she thought might help.

Her report is due shortly.

Administration

The following has been undertaken since the last meeting:

Completion of spreadsheet provided by Andy Duncan, Church Buildings Funding Support Officer: He
sent over a proforma, which I've now developed. He'll use the revised details to assess the best way forward
and has scheduled time in his diary on 14th October 2025 to prepare a grants target list for Hartshill and
consider phasing options.

He also suggested we explore the use of a Bill of Quantities (BoQ) in future. A BoQ is a comprehensive construction document that itemises materials, components, and labour, enabling accurate pricing, consistent tendering, and effective cost control throughout a project.

However, as we're not engaging a Main Contractor and have already completed the bulk of our tendering - particularly with the electricians - Nick BB and I agree that a BoQ would be excessive for our needs. It's also a time-intensive process to produce for each area of work.

Meeting with Audio Visual Direct, on 30th September 2025; This was a meeting arrange by Nick M, which I attended. They have quoted to upgrade our audio-visual capabilities to a predominantly wireless system.

Their quote states that we currently have a good system in place, that is functional for our needs, but we would like it future proofed for the foreseeable and made reliable but still easy to use for the congregation.

Their proposal, on a supply & install basis, comes in at £8,600 plus VAT – against our planned budget of £10,300 plus VAT.

It includes:

- Simple to use (Remotely Operated anywhere in the room) Digital Sound System/Bundle (Digital Mixer, Amplifier & Galaxy Tablet to control)
- Replacement Amplifier
- Hand-Held Radio Microphone System
- 3 x Lapel (Clip) Radio Microphone System
- 2 x Lectern/Pulpit (gooseneck) Radio Microphone System
- Wall mounted Speaker with independent volume control (for the 'church' room)
- Professional Bluetooth Audio Receiver
- Induction Hearing Loop Amplifier
- 2 x 75" LED HD TV Monitor Screen (Samsung/LG/Hisense) Wall Mounted
- 2 x 43" LED HD TV Monitor Screen (Samsung/LG/Hisense) Wall Mounted
- Note The System will be using a Wireless HDMI Extender kit including Transmitter and Receiver allowing HDMI to be sent over the air without HDMI Cables from Laptop to Screen (ACCSOON)
- **Produced a Gannt Chart for our project:** This is a visual project management tool that outlines tasks against a timeline. It shows start and end dates, task durations, and dependencies. Crucial for planning and tracking progress, it should help us to stay organised, meet deadlines, and identify potential delays early for better decision-making and resource allocation.
- Started to produce RAMS (Risk Assessment and Method Statement) for the project: This is a vital health and safety document in construction. It outlines potential hazards, assesses risks, and details safe working procedures. RAMS ensures workers understand how to carry out tasks safely, helping prevent accidents, comply with regulations, and maintain a secure working environment. This is mostly focussed on the areas of work we will undertake ourselves, as other contractors will be asked to provide their own RAMS before they can commence works.
- Produced a Heating Resilience Plan: This document is required for the larger fund applications. I have developed to proform supplied by Colin Angus, Net Zero Carbon Project Officer at the Diocese of Coventry, to include items focussed on a resilient building as well as a heating plan. It includes items such as comfort and usage; environmental impact; preservation of historic fabric; practical reliability; current heating audit; building fabric assessment; heating strategy: technical, environmental, financial, operational, heritage and community resilience; environmental and heritage considerations; financial planning; budget breakdown; implementation timeline; and different scenarios and how our plans may be impacted with an all electric heating system.