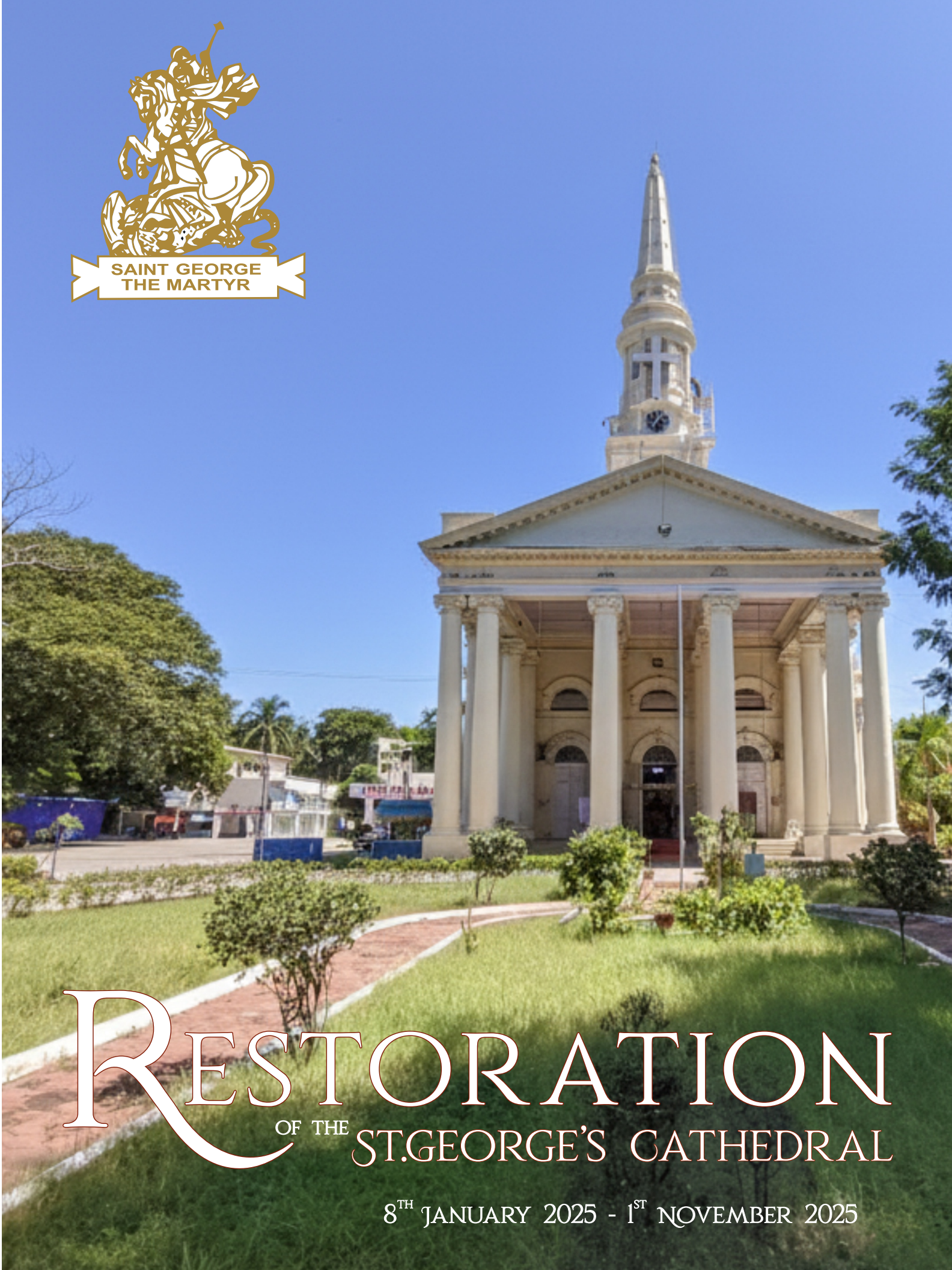

RESTORATION

OF THE ST.GEORGE'S CATHEDRAL

8TH JANUARY 2025 - 1ST NOVEMBER 2025

ST. GEORGE'S CATHEDRAL

CHENNAI

RESTORATION
OF THE ST.GEORGE'S CATHEDRAL

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Foreword from the Bishop's Desk

The Rt. Rev. A. PAUL FRANCIS RAVICHANDRAN
Bishop in Madras

CHURCH OF SOUTH INDIA - DIOCESE OF MADRAS

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The Rev. S. Augustin Premraj, B.Sc., B.D.	Hon. Secretary, MDC-28115805
Prof. Dr. J. Samuel Cornelius, M.Sc., M.Phil., B.C.S., Ph.D.	Hon. Treasurer, MDC-28113589

Greetings in the name of our Lord Jesus Christ!

My heart is filled with gratitude as I pen these words at a historic moment. St. George's Cathedral has been a beacon of faith, hope and service for over two centuries in the heart of Chennai. Today, we enter a new chapter of its unfolding story.

The restoration project undertaken at our Cathedral is not simply a repair or renovation. It is an act of stewardship and faith. This sacred space has cradled generations of worshippers, from colonial officers and early congregations to today's diverse and vibrant Christian families. It has heard whispered prayers of thanksgiving, the cries of lament, the solemn vows of marriage, the tender farewells of funerals, and the joyful songs of Easter dawn. Each stone carries within it the stories of people who have met their God here.

Its beauty is not merely in its design or grandeur. It lies in the aura of prayer that has permeated these walls. The Cathedral has stood through wars, social changes, independence and the growth of our beloved city. It has remained steadfast, calling people of every generation to kneel at the feet of our Lord and Saviour Jesus Christ

Yet, like all earthly structures, time takes its toll. Weather, pollution, and the natural ageing of materials have left their marks. Cracks have appeared in the plaster, the roof has strained under monsoon rains, and the stained-glass windows have grown fragile. And herein lies the divine call to restoration. To restore is to honour history and preserve the witness of the past so that it may inspire the future.

This project is not the work of a day, nor the labour of a few. It is a collective effort of our entire diocesan family, supported by heritage experts, artisans, conservation architects, and most importantly, the prayers and contributions of a community called to worship and serve. It is a task undertaken with reverence.

Scripture reminds us that our God is a God who makes all things new. The prophet Isaiah records God's promise: "Behold, I am doing a new thing; now it springs forth, do you not perceive it?" (Isaiah 43:19). In the same way, the renewal of our Cathedral is a visible sign of God's ongoing work among us.

We undertake this restoration not only for ourselves, but for those who will come after us. We are but stewards of a legacy entrusted to us by those who built, preserved, and cherished this Cathedral before us. Their sacrifices made it possible for us to worship here today. In turn, we must ensure that generations yet unborn will also find a sanctuary of peace and faith.

As Chennai grows and transforms, St. George's Cathedral is a symbol of continuity. I take this moment to express heartfelt gratitude to all who have made this restoration possible. May God richly bless you.

Our vision is not simply a beautiful building, but a vibrant and unified Cathedral community where worship is offered, where the marginalised find welcome, where young and old discover purpose, and where the love of Christ is made visible in thoughts, words and deeds. With thanksgiving, hope, and prayer, I commend this restored Cathedral to the glory of God and to the service of His people.

First servant of Madras Diocese

06/10/2025

Rt. Rev.A.Paul Francis Ravichandran
Bishop in Madras

From the
CONVENOR'S DESK

Col David Devasahayam,

In February 2025, I received a letter from the presbyter of St George's Cathedral inviting me to be the Convenor of the Building Committee responsible for the Restoration of St George's Cathedral. It was a prayerful moment and I was reminded of a similar invitation in February 2012, thirteen years back, to be the Convenor of the Restoration Executive Committee. We had all wanted to fully restore the Cathedral before the bi-centenary celebrations in 2015. However, due to an unforseen turn of events, this was inordinately delayed and we were now re-attempting it thirteen years later.

That Sunday, as I sat in the pews and prepared to address the congregation for the first time as the Convenor, I looked around our monumental Cathedral soaking in its beautiful history.

Pillars of Faith:

The Journey of St. George's Cathedral

Nestled in the heart of Chennai, St. George's Cathedral is a symbol of faith and heritage. Its graceful spire, standing 139 feet tall, is a familiar landmark that reflects both architectural splendour and enduring Protestant traditions.

Towards the end of the eighteenth century, Europeans, both officials and merchants, started building houses outside the Fort St George area. It was difficult for them to travel to St. Mary's Church, and hence, there was a need for a church closer to home. Around 1807, a request was made to the Governor, asking if a second church could be built. A few decades passed before a land was chosen. This was called 'Choultry Plain', donated by the Nawab of Arcot.

This majestic neoclassical edifice was built of lime and mortar. It was designed by a senior engineer of the East India Company, Col. James L Caldwell, with assistance from Captain Thomas De Havilland, and was one of the six Churches to be built in India before 1833. It had an elegant portico with stately pillars, a long nave, serene interiors and side entrances built on a tier of steps. Adding to its grandeur were marble statues, mural tablets, and memorials.

The beautifully-painted stained glass windows of St George's Cathedral continue to let in sunlight over two centuries later, bathing the interiors in warmth. Two important events in the life of Jesus are depicted on the stained glass panels that flank the altar on either side. On the left is a visual of His Baptism by John the Baptist in the River Jordan, with the Holy Spirit descending in the form of a dove. On the right is Jesus' resurrection along with Mary Magdalene.

The Church was completed with the contributions of people towards a lottery fund, and cost 41,709 pagodas. A further 57,225 pagodas were spent on furniture, the organ and architect's commission. For context, one pagoda was equivalent to Rs.3.50 at the time. A license was issued by the Bishop of Calcutta, dated April 15, 1815 to hold services, which were conducted from 1815 onwards. However, the Church was eventually consecrated on January 8, 1816 by Rev Thomas Fanshaw Middleton, the first Anglican Bishop in India. He wrote, "I was assisted on this occasion by seven of my clergy, a great number to bring together in this country." He also thought that the new Church was "handsomer than anyone in England."

A turret clock was gifted to the Church by the Directors of the British East India Company in 1828, set up on the three faces of the steeple. The belfry was completed in 1832. With various donations, other aspects of the Church soon fell into place, such as the altar table, brass altar cross, chiming device, Episcopal chair, Bishop's Throne, Litany stool, clergy seats, gold chalice set with diamonds in the shape of a cross, paten for Holy Communion, and altar rail. The pipe organ is one of the oldest and most majestic in the country.

In 1835, St. George's Church was raised to the status of Cathedral of the Diocese of Madras, when Rev Daniel Corrie was consecrated as the first Bishop of Madras. In a life-size sculpture, he is depicted in his robes with a Bible in one hand, the other hand resting on the shoulder of a native boy. The inhabitants of Madras who created the monument mention his manifold services to promote the cause of the church and society. The editor of the inscription observes: "His name will be handed down to posterity in the Madras Presidency in connection with Bishop Corrie's grammar school, which he founded and still bears his name; the oldest purely educational institution in the city".

Statue of
Bishop Daniel Corrie
the first Bishop of Madras

The Governors of Fort St. George and visiting Viceroys worshipped at the St. George's Cathedral. The backdrop to the altar features an alabaster sculpture of the ascension of Our Lord Jesus Christ. Above, is a black statue of George, the patron saint of England, depicted slaying a dragon. Of course, there have been additions, alterations and repairs at regular intervals. For instance, a teakwood roof was added in 1884. Eight large musical bells of varying sizes were manufactured in London in 1871 by Messrs Mears & Steinbank. These were presented to the Cathedral during Christmas 1873.

The Cathedral is not just a place of worship, but also a historical repository with its unique artefacts. Marble statues and mural tablets strewn all over the cathedral are treasure chests of history. The services and sacrifices of bishops and archbishops, scholars and statesmen, missionaries and military commanders – "men who made a difference in the lives of the people in India" – are recapitulated in these monuments.

An inscription under the statue of W. Parry (1824), founder of the house of Parry & Co in 1795, says, "in his were happily united those qualities which elevate and adorn the human character" and that he "endeared him (self) to the native and European inhabitants". The company founded by W. Parry two hundred years ago prospered, and has become an arbiter of the economy of Tamil Nadu.

The Cathedral has a large cemetery dating back to over two centuries. The first interment was Elizabeth de Havilland in 1818. The large bell that tolls at funerals is so deep and resonant, that in the old days, everyone in Madras could hear it chiming. Initially, the guardrails of the cemetery were made up of war insignia including muskets and bayonets that dated back to the capture of Seringapatnam in 1799. These no longer exist today.

On September 27 1947, the Church of South India (CSI) was inaugurated at St. George's Cathedral, following Indian independence. In addition to a packed Cathedral, there was a pandal outside that held over 2,000 people on this historic occasion. The event marked the union of several Protestant denominations. It transformed the Cathedral's role from a colonial church into a unifying centre and 'mother church' of the CSI. On 25th January, 1955 Madras Diocese got its first Indian Bishop, the Rt Rev David Chellappa.

Post-independence, a new era was ushered in with a parsonage, the Vergers quarters and Parish Hall. Today, CSI has 24 Dioceses across Tamil Nadu, Kerala, Karnataka, Andhra Pradesh, Telengana and Jaffna. There are more than 14000 churches, 2130 educational institutions and 104 hospitals under its umbrella. CSI has 45 lakh members across all states.

The first Indian Bishop, the Rt Rev David Chellappa

The inauguration of the Church of South India, St. George's Cathedral, Madras. September 27, 1947

The Importance of the Restoration Project

The importance of the project was therefore not lost upon any of us. After the meticulous groundwork, the Secretary of the Pastorate Committee, Arun David Ambrose had made a firm beginning in June 2024 by signing an MOU with IIT Madras for conditional assessment.

In the early nineties, the first (documented) association of IIT Madras with St George's Cathedral was under the leadership of Prof PC Varghese (the first Head of the Department, Civil Engineering, IIT Madras), who assisted in the structural damage assessment of the building. Subsequently, M/s. Pithavadian & Partners (led by Structural Engineer Zachariah George) designed and executed the structural retrofit. The second generation of contact was in 2012, when a team led by Prof. M.S. Mathews, and involving professors SR Gandhi and Arun Menon, prepared the Detailed Project Report (DPR) for complete structural conservation of the Cathedral in preparation or the bicentenary celebrations. However, this was not implemented, and the current exercise in 2024-25, involving Prof Arun Menon, is in fact a third era of contact between the two institutions, which built on the DPR made in 2012. He made a presentation of the DPR to us as the Building Committee in September 2024.

Arun David Ambrose made a successful presentation to the Chennai Metropolitan Development Authority (CMDA) Heritage Committee in December 2024, receiving the CMDA approval for the Restoration in January 2025. The Centre for Urbanization, Building and Environment (CUBE) was onboarded as Project Management Consultants. The commencement of Restoration work began on 8th January 2025 coinciding with the Cathedral Consecration Day, and in February, I was invited to be the Convenor, having earlier been a member of the Building Committee. The first requirement for us was to establish a temporary church.

Purpose of Establishing a Temporary Church

The restoration of St. George's Cathedral was both intricate and extensive, calling for patience, skill, and prayerful diligence with the aim of preserving the church's historic workmanship and craftsmanship while ensuring that the highest standards of safety were upheld. Large-scale scaffolding, complex civil and structural repairs inside and out, and the delicate cleaning and refurbishment of our Cathedral's treasured artifacts all demanded specialist skills and time. To allow the workers unhindered access and enable the restoration to proceed smoothly, it became clear that a temporary place of worship was required for the congregation.

The Concept of the Design and Execution

The responsibility for concept, design and execution was entrusted to S Franklin Prabhu, a consummate professional in System Engineering, Design and intricate Project Management with over 33 years of comprehensive international experience in the USA and South Korea. Contemplation over the design of the temporary church — its overall size, layout, entry and exit points, and walkways — was guided by careful consideration. God's quiet guidance inspired

The temporary Church structure

us to use the exact dimensions of the main church as the baseline for the temporary structure, building the remaining facilities around it. An unforgettable early-morning indicator from God marked a pivotal moment of clarity for the project. From that point onward, ideas unfolded effortlessly, and every measurement was set with striking precision. Practical considerations for the congregation's comfort which included optimal ventilation, smooth air circulation, a serene ambience, balanced lighting, and protection from birds or small animals, were met with providential solutions. High-volume HVLS fans which move 12,000 m3 of air per minute, CNC-cut panels, and the thoughtfully crafted lighting design by architects Harini and Nandalal (offered as an act of devotion) all came together as divinely guided solutions, enhancing both the functionality and beauty of our temporary church.

The temporary church structure encompassed a total surface area of approximately 45,000 square feet, comprising a 14,400-square-foot platform area, 6,240 square feet of wall surface, 8,512 square feet of false ceiling, and a 15,725-square-foot roof - each carefully designed to ensure structural integrity and congregational comfort. Through God's divine guidance and blessing, the entire structure was completed in just 35 days (from 24 February 2025 to 30 March 2025), standing as a testament to His providence. Though it was termed a temporary church, the structure still needed to be safe, sturdy, and resilient enough to withstand the region's three harsh weather seasons: the intense summer heat, the strong winds of the Southwest Monsoon, and the heavy rains and storms of the Northeast Monsoon. In essence, it required the careful planning and durability of a permanent church, built with cost-effective materials. Easwari Pandhal was chosen as the contractor from three tender options, agreeing to take on the project while fully meeting the technical specifications, adhering to the execution timeline, and offering a competitive price.

Final Days Towards Completion

The final days of the project proved to be an extraordinary experience. Volunteers, church members, and church staff all came together, energetically coordinating the relocation of pews, the audio system, choir seats, the altar table, and other essential elements. Throughout the process, God's presence and guidance were profoundly felt, enabling every individual to contribute their very best and helped bring life to and transform our temporary church into a beautiful space of worship, purpose, and devotion.

On the day of the inauguration (30 March 2025), our church was filled with a profound sense of reverence and devotion. Our Pastor, Rev Deivaputhiran's opening prayer set the tone, followed by the choir's uplifting songs and the heartfelt prayers and worship from the congregation. Throughout this celebration, the presence and blessings of the Lord Almighty were tangibly felt, filling the temporary structure with sanctity and transforming it into a true house of worship where every heart could commune with God.

Major Worship Services and Events

By the grace of God, our temporary church has faithfully served the congregation, providing a sacred space for worship and fellowship during a variety of important events. It has successfully accommodated large gatherings, including:

1. The Good Friday Service on April 18, 2025
2. The Easter Service on April 20, 2025
3. The Bishop Consecration Service on August 3, 2025
4. The 79th CSI Formation Day on September 27, 2025

Each occasion bore witness to God's blessings, filling the church with devotion, joy, and a spirit of unity among all who attended.

The SGC Restoration Core Team

We had nine months in which to execute the restoration that began in January. With worship services commencing in the temporary church, there was a need to clearly allocate responsibilities to qualified volunteers from the congregation and members of the Building Committee to oversee day to day operations and ensure completion on laid down timelines.

Operations

Arun David Ambrose as the Secretary of the Church Pastorate Committee was passionately involved and instrumental in restarting this Restoration initiative. A certified Project Management Professional with a degree in Computer Science and Engineering besides a certification in Supply Chain Management from IIM Kolkata, Arun was deeply involved in every facet of the Restoration process. He invariably prepared and conducted detailed progress presentations to the Building Committee, the Cathedral Congregation, the Diocese and the Bishop, when necessary.

Col David Devasahayam with Arun David Ambrose and S Franklin Prabhu

S Franklin Prabhu duly tried and tested in the design and execution of the Temporary Church, **oversaw the Operations overall from start to finish**. His clear guidelines and immaculate planning led to the work being completed within laid down schedules. His leadership focus was on electrical work and façade lighting.

A container office was set up on the premises of St. George's Cathedral, which became the nerve centre for meetings thereafter.

Jenix Dev Singh is a distinguished civil structural engineer and entrepreneur chairing the DABC Group of companies (presently Dev Ventures) incorporated in 1989. The company has developed over 8000 residential and commercial units, covering about 17 million sq ft. Awarded the coveted FIE by the Indian Institute of Engineers, Jenix volunteered to take on the **supervision of the Civil Works, the Wood Works and the Waterproofing** of the Cathedral.

Paul Christopher is a graduate in Electrical and Electronics Engineering from NIT Tiruchi. With nearly 40 years of Electrical consultancy work including a special assignment in the USA, he volunteered to **support the transformational electrical work** done in the Cathedral.

Prof SF Rajaratnam, who had been helpful in getting the CMDA approval, provided his wise counsel during every meeting and **volunteered to help with the landscaping**.

Brian Taylor, though holding down a full time Corporate job, volunteered to monitor daily progress at the site, **providing a daily report on all activities** in different segments of work.

Amritha Samson, a youthful member of the Pastorate Committee undertook to keep **the congregation informed with a monthly Restoration Bulletin** giving the progress of work.

Finance

Dr K Paul Jayakar, a reputed Chartered Accountant and Doctorate in Finance volunteered to oversee the Finances and Financial Management of the Restoration along with a small team of volunteer accountants. **Dr Mercy Rajasekhar**, the treasurer of the Pastorate Committee ably supported him. The restoration of St. George's Cathedral, was undertaken with sincere prayers and meticulous planning.

The various components of the restoration plan were scrutinized by the IIT-M and CUBE (the QS and PMC).

The tender evaluation process ensured transparency, fairness, and value for money in the selection of contractors, suppliers, and service providers. It establishes clear guidelines for assessing bids based on technical capability, financial soundness, and compliance with project requirements.

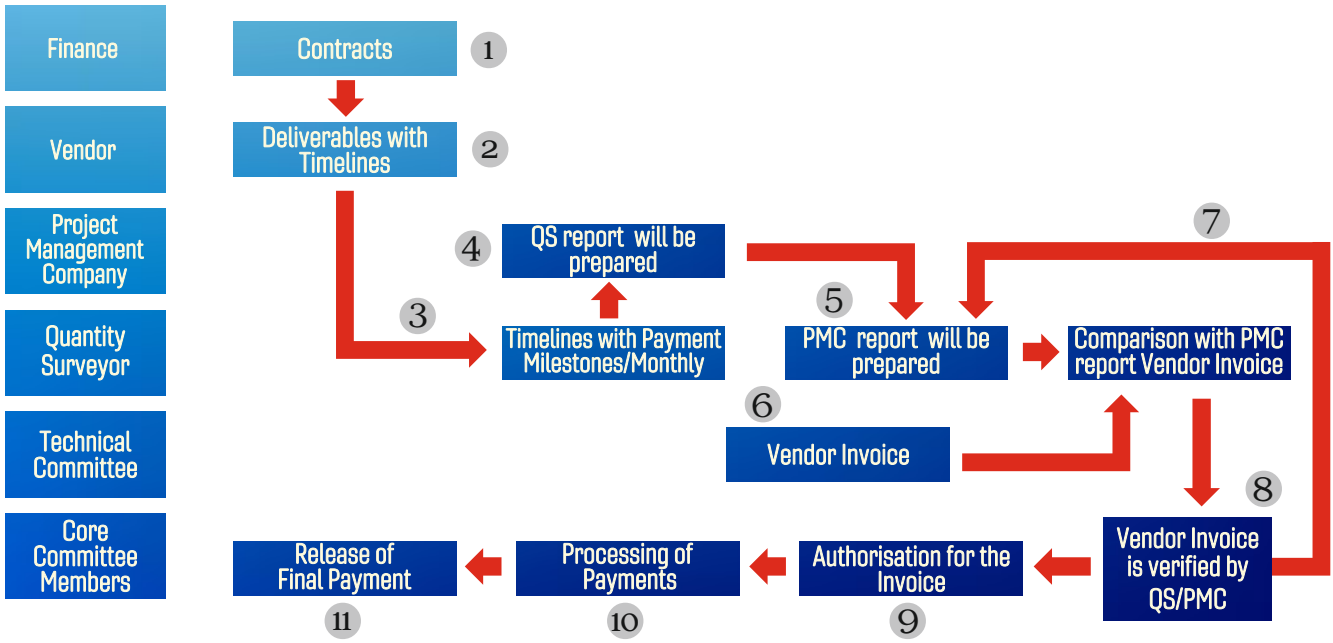
The steps followed were:

1.Receipt and Opening of Tenders
2.Preliminary Scrutiny
3.Technical Evaluation
4.Financial Evaluation
5.Combined Evaluation and Ranking
6.Recommendation and Approval

The payments are based on milestone/monthly clearance as per the process outlined.

1. Core Committee Members - *Contract Items*
2. Technical Committee - *Deliverable with timelines*
3. Quantity Surveyor - *QS Report to be prepared*
4. Project Management Company
   - *Timelines with payment milestones/ monthly*
   - *PMC Report to be prepared*
   - *Comparison with PMC report with vendor invoice*
5. Vendor - *Vendor Invoice*
6. Finance - *Vendor Invoice verified by QS/PMC*
   - *Authorisation for the Invoice*
   - *Processing of Payments*
   - *Release of Final Payment*

SOPs were prepared for the above, including one-time payments for services.



The restoration of St George's Cathedral fostered collaboration across disciplines, uniting conservation architects, stonemasons, engineers, artists, Stabadi workers and passionate volunteers. Each person added a vital piece to the puzzle, transforming a fragile monument into a vibrant centrepiece of urban and spiritual life. The individuals and teams who undertook these restorations worked tirelessly behind the scenes, guided by a profound respect for architectural integrity and historical accuracy. Their work demands immense patience, technical mastery, and making difficult decisions to balance protection with accessibility. Praising and acknowledging the contribution of these men and women is essential, not only for their technical achievements, but also for their vision and perseverance. Craftsmen painstakingly revived stained glass with precision honed over years of study, engineers strengthened foundations without disturbing their historic integrity, historians and conservators ensured that every detail reflects authenticity.

Our aim is to factually record for posterity what was done diligently and passionately. To honour those who restore historic Cathedrals such as this one, is to acknowledge their role as guardians of heritage and timeless beauty. Their dedication reminds us that even the oldest creations can find new life through human care and devotion.

With you in Prayer,

Col David Devasahayam
Convenor, Restoration of St George's Cathedral
(January - November 2025)

* * *

I would like to thank Neeti Jaychander whose detailed research and immaculate drafting skills assisted me editorially in shaping this coffee table book. Her thoughtful contributions and dedication made this collaboration special and meaningful.

* * *

SAINT GEORGE
THE MARTYR

Our Cathedral Presbyters

Presbyter
Rev Dr A Ruben Jayakumar

Associate Presbyter
Rev Mrs Indira Paul

Our SGC Restoration Team

Col David Devasahayam,
Convenor

Mr Arun Ambrose,
Secretary

Dr Mercy Rajasekar,
Treasurer

Mr Franklin Prabhu

Mr Jenix Dev Singh

Dr Paul Jayakar

Mr Paul Christopher

Mr S F Rajaratnam

Mr Brian Taylor

Dr Amrita Samson

SAINT GEORGE
THE MARTYR

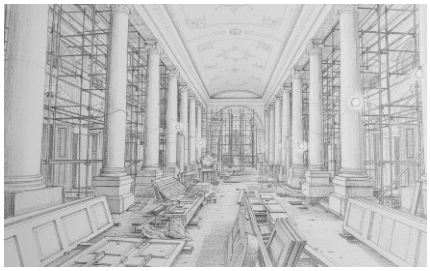
St.George's Cathedral through the ages

Waltercolour Originally published in Madras, 1849.
Illustrated by Justinian Gantz

RESTORATION

OF THE
ST.GEORGE'S CATHEDRAL
CHENNAI 2024-25

PROF. ARUN MENON



The intense exercise of restoration of St. George's Cathedral in 2024-25, about 210 years after the inauguration of this revered place of worship, was an effort that had its beginnings in 2012, in preparation for the bicentenary of the Cathedral, when a detailed evaluation of the premises was undertaken by IIT Madras, led by Prof. M.S. Mathews, involving Prof. S.R. Gandhi, both from the Department of Civil Engineering, and Dr T. Satyamurthy, former Superintending Archaeologist (Chennai), Archaeological Survey of India.

While the intended full-fledged restoration was not initiated in 2012, the body of work formed a most important starting point for the restoration effort launched in 2024, twelve years later. Having been a part of the team in 2012, picking up from where we had left off in 2012, gave us a vital head start. For example, an issue that has remained a concern for decades, or perhaps centuries, is the reappearance of cracks in the masonry walls from time to time. Through a detailed study conducted in 2012, the cause for concern and the severity of the problem were laid to rest, and the adoption of groundwater recharge strategies was understood to mitigate the structural distress.

At this juncture, it is important to point out that one of the key reasons for reduced intensity of the structural distress was the structural interventions planned and executed in the 1990s. That brings me to what can be considered the first-generation involvement of IIT Madras with this renowned place of worship. Led by Prof. P.C. Varghese, who was the former Head of the Department of Civil Engineering, IIT Madras, a serious structural retrofit involving the introduction of reinforced concrete (RC) tie beams, just below the roof slab level, designed and executed with the involvement of Mr. Zachariah George of M/s. Pithavadian and Partners, Chennai, was the key to this improved structural behaviour of the building that the Cathedral had been grappling with right from inception. IIT Madras considers the opportunities it has had to engage with the institution of the Cathedral over the decades as its continuing commitment to ensuring the safety of built cultural heritage in the city and the country.

The detailed evaluation undertaken in 2024 involved reassessment of the conditions of the RC roof slabs of the aisle (replaced after a partial collapse of Madras terrace slabs in 1947), the protective and decorative lime plaster, affected severely by rising damp and presence of widespread cement plastering obstructing breathability of the masonry, timber beams and rafters in the porticoes, the unique papier-mâché decorative ceiling of the nave, and most importantly the waterproofing provided by the roof.

If the last nine months of intense restoration efforts have left the Cathedral not looking very different from the past, we would have done our job! This also camouflages the intricate, difficult, and time-consuming work that has been undertaken on restoring the structural health of the masonry walls, the portico roofs, the roofs of the aisles and the naves, and many others.

Through several rounds of discussion (tense at times, to say the least) and several design iterations involving all the professionals and contractors, an attempt was made to follow internationally accepted principles of minimum intervention and respect for the authenticity and historicity of the original fabric of the construction. While a significant upgrade of the service infrastructure, mainly the electrical, lighting, and rainwater drainage, has been undertaken, we must remember that these services and embellishments will be outlived by the over two centuries old masterpiece of construction. This must remain our guiding principle in preserving this masterpiece for generations to come.

Prof. Arun Menon,
Dept. of Civil Engg., IIT Madras and Coordinator, National Centre for Safety of Heritage Structures (NCSHS), IIT Madras.

Ms. Yedida Ashita
(MS Scholar), Dept. of Civil Engg., IIT Madras

Mr. Amit Chauhan
(PhD scholar), Dept. of Civil Engg., IIT Madras

Ms. Audrey Alvares
(Conservation Architect), Senior Project Officer, IIT Madras

SAINT GEORGE
THE MARTYR

St.George's Cathedral through the ages

St George's Cathedral in Chennai (Madras), India, circa 1865

SAINT GEORGE
THE MARTYR

PROJECT MANAGEMENT
CONSULTANCY

PROJECT MANAGEMENT
CONSULTANCY SERVICES FOR THE RESTORATION

Centre for Urbanization, Buildings & Environment [CUBE] is an outfit arm of IIT Madras, and a Centre of Excellence of Govt of Tamil Nadu, established vide G.O. MS.No.79 dated 30 March 2017. The establishment was entrusted to provide PMC services to facilitate the meticulous restoration of St. George's Cathedral, a heritage church building, as per the conceived DPR, into a seamlessly executed project that preserves its historical and architectural sanctity while elevating safety and functionality to contemporary standards through comprehensive end-to-end management.

Mr. John Joseph
CUBE - PMC

Mr. J Gurumoorthy
CUBE - PMC

Mr. Keerthiharan Kanthasamy
CUBE - PMC

The major scope of PMC services rendered by CUBE for the restoration of SGC included:

A Preparation of a restoration plan after detailed study of the DPR.

B Assistance with the selection of experienced and apt contractors suitable for the restoration.

C Aiding the contractor in developing a master construction program, construction methodology and work schedule, QAP and EHS plans.

D Monitoring the construction carried out in accordance with the approved working designs, drawings, and specifications laid down in the contract agreement.

E Regular inspection of work during the execution on the following two major factors: -

Material Aspect: Quality and testing of materials, keeping in view the requirement of contract specifications, BIS marked/approved products.

Workmanship Aspect: Execution of work with sound engineering practice and laid-down principles.

F Progress monitoring and reporting on planned progress vs. actual progress and highlighting the shortfall in milestones/target dates to develop a course correction plan.

G Monitoring EHS and other accepted environment-friendly sound practices to control dust, noise, water, air and soil pollution due to construction activities, and general safety, security and hygiene at the construction site regularly, to ensure minimum disruptions.

H Certifications of contractor bills, forwarding the bill with all backup documents to the client with recommendations.

I Conducting periodic review meetings with all the project stakeholders to address work progress, quality and safety issues related to model city projects, and preparing minutes for recording and circulation.

J Submission of Monthly Progress Reports regularly.

K Reviewing and finalizing As-built Drawings submitted by the contractor.

L Assisting in contract closure and handing over of the project

CUBE has played a pivotal role in the restoration of St. George's Cathedral with high quality, completing work within the time stipulated by the Church committee.

SAINT GEORGE
THE MARTYR

CIVIL WORKS

AT

ST.GEORGE'S CATHEDRAL

CHENNAI

The aim of the restoration project at St. George's Cathedral was to conserve this historically significant monument through a comprehensive approach, encompassing structural stabilisation, material conservation, and sustainable practices. The initiative focused on ensuring authenticity and longevity by employing traditional techniques and compatible materials while adhering to established heritage conservation standards.

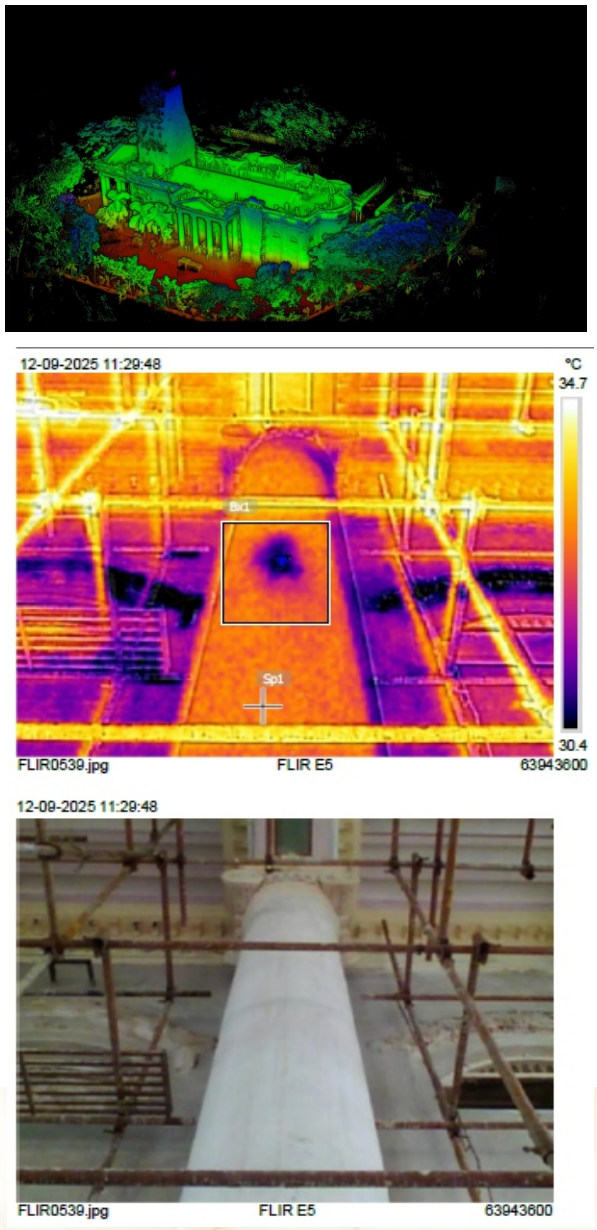
Condition Assessment

A detailed on-site condition assessment was conducted to evaluate the cathedral's structural and material state. The exterior survey revealed deterioration of the lime plaster, cracking of brick masonry, and decay of timber elements. Additional issues included damaged stained glass, vegetation growth, moisture ingress through terrace joints, and disfigured electrical installations. The interior analysis identified cracks on ceilings, peeling paint, decayed cane seating, and visually incompatible timber panelling. Recommendations emphasised lime re-plastering, timber replacement, vegetation removal, terrace waterproofing, and concealed service routing. The overall assessment highlighted the need for an integrated conservation strategy combining structural repair, material restoration, and visual coherence.

Digital Documentation

Advanced digital documentation methods were employed to record the Cathedral's present condition with precision. LiDAR scanning combined with photogrammetry produced a high-resolution 3D model that facilitated accurate measurements and mapping of structural deformations. Infrared thermography identified areas of trapped moisture and internal deterioration, while moisture meters provided quantitative validation.This scientific documentation ensured an informed conservation process supported by measurable data. Photographic documentation of the entire process of restoration was also carried out continuously.

The restoration of St. George's Cathedral adopts a comprehensive approach, combining traditional materials, scientific techniques, and best-practice conservation strategies to preserve the architectural and historical integrity of the structure.



Infrared thermography identifies trapped moisture

Spire

An assessment was done for the steeple to determine the condition of the existing lime plaster, and as the lowest level was found to be highly deteriorated, it was carefully chipped off and re-plastered with traditional lime mortar in three layers to achieve the previous thickness of the plaster. The four decorative urns near the clock tower were also reconstructed, with a teak wood dowel and strips of bamboo provided as reinforcement, and the details recreated using fine lime mortar. The existing lime plaster was retained in all other levels of the steeple apart from areas where there was significant damage observed, as well as in the decorative plaster, such as the volutes in the capitals in the lantern of the steeple, which were redone by highly skilled sthapatis,who specialised in working with lime. As the external surface of the steeple had, over the years, received several coats of paint with the thickness almost as high as 10 mm in many areas, it was necessary to remove both the loose paint and these multiple layers through careful scraping to achieve an even surface for painting. Water-based paints were used throughout the Cathedral when repainting to ensure the breathability of the lime plaster.

Extensive woodwork was done in the spire. The wooden doors leading to the terrace on the lowest level, the staircase leading to the belfry, and the double door as well as the trap door inside the clock tower, and single door in the lantern of the steeple all being recreated with salvaged Burma teak wood procured from Karaikudi to the exact dimensions and patterns of the previous woodwork.

A comprehensive lightning arrester system was also provided, in addition to the existing system, to provide a higher coverage of protection to the Cathedral. An additional air terminal, higher than the previous one, was provided. Aluminium rods running throughout the length of the parapet wall and roof above the nave, brought down the external walls and earthed at ten points.

Vegetation growth on terraces, cornices, and steps was addressed through a controlled chemical and mechanical removal process. Plants were injected at the root zone with an approved chemical solution to ensure complete drying and to prevent regrowth. After a few hours, the dried vegetation and root systems were carefully removed without damaging the surrounding masonry. Voids and cavities formed by root penetration were cleaned and filled with lime grout to restore surface integrity and prevent moisture ingress.

Post Restoration

Terrace

Parapet Baluster Restoration: Condition assessments revealed significant deterioration in some balusters. Severely damaged balusters were replaced with cement replicas cast in halves using fibre moulds derived from original lime-plastered balusters. Stainless steel rods coated with Paraloid B-72 were embedded centrally for reinforcement. Balusters in fair condition were repaired using lime mortar patching to achieve a uniform surface for finishing. Original dimensions and profiles were maintained to ensure structural and visual consistency.

Flower Vase Restoration: The two ornate flower vases present over the parapet walls had highly obscured features and detailing; hence, the decorative plaster was carefully redone by highly skilled sthapatis.

Parapet Coping Restoration: Existing lime plaster on the coping of parapet walls was manually removed and re-plastered in two coats of traditional lime mortar. The width, height, and slope of the original coping were matched to facilitate proper rainwater drainage and prevent stagnation.

Roof Installation: The original asbestos roof above the nave was replaced with Kingspan Jindal PUFF panels with galvalume steel for enhanced insulation. The curb walls beneath the eaves were rebuilt with increased height to prevent rainwater ingress, and Kerala teak blocks were installed along alternate purlins to support the new panels while maintaining the original roof slope.

Terrace Slope Correction and Screeding: Rainfall analysis and site assessment indicated the need for additional drainage. The terrace was cleaned, and slopes were re-proportioned for efficient water flow. Cement screeding was applied over RCC areas, while lime concrete was used for traditional sections. Cracks were grouted with epoxy and brick bats, and button markers ensured accurate slope levels. Flashing was provided above the drainpipe mouths, and the terrace was finished with epoxy waterproofing.

Down Take and Lead Pipes: Damaged or clogged lead pipes were replaced with PVC pipes of equivalent diameter. The surrounding brickwork was carefully chipped and packed with lime mortar and brick bats. Bell mouths were created around pipe entries to ensure efficient water flow and prevent future blockages.

Parapet Wall Crack Repairs: Cracks less than 3 mm were filled with lime mortar, while larger cracks were stitched using brick and grout. Loose plaster and decayed timber within masonry were removed carefully, and decayed timber rafters were replaced with treated seasoned hardwood. Cracked brick masonry was re-laid with lime mortar and finished flush with existing profiles. The restored surfaces were completed with lime plaster to maintain breathability and visual continuity.

West Portico Terrace Crack Restoration: Detailed documentation, careful dismantling, timber replacement, masonry repair, and final lime plaster finishing were carried out to restore horizontal cracks up to 5" in width, integrating repairs seamlessly with surrounding masonry while maintaining structural integrity and heritage authenticity.

Before and After

Rafters & Beams

The entire structural woodwork of the Cathedral, both interior and exterior, has been completely inspected, and as required, interventions were made to strengthen the building. The rafters in the three porticos of the church were examined using a knock test, and a total of ten of the rafters had to be replaced in the side porticos and one in the choir room.

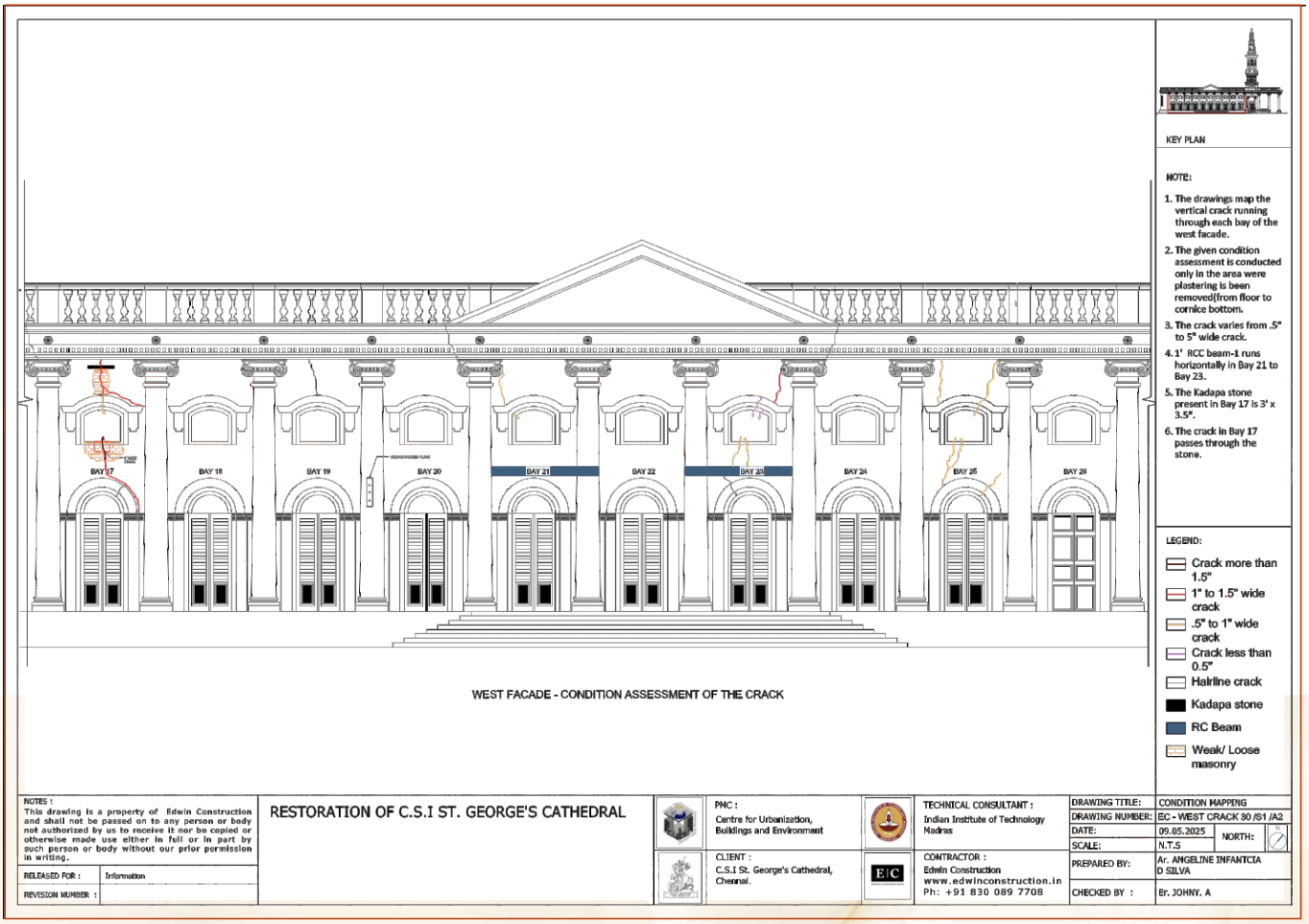
As several of the bottom panels covering the beams in the porticos were severely damaged, these panels were entirely removed, and the beams above them were inspected. For the bottom panels that were completely intact, smaller parts of the panels were carefully dismantled, and after the beam was inspected, the removed panels were refitted.

A total of nine beams in the porticos of the church were found to be in a significantly deteriorated state due to termite attack and hence required additional strengthening. After the bottom panels were removed, it was discovered that the gap between the main beam and the side panels on either side was maintained using a spacer block with iron rods holding it in place. In order to maintain the historic material value of the beams, the main beam was retained, and in the gap present between the beam and side panels on either side, an additional supporting beam was introduced along the length in these gaps with adequate bearing length. It was therefore required to remove these spacer blocks, and the iron rods were cut through gas welding. The additional support beams were then integrated with the main beam by means of stainless-steel bolts at six locations, and new bottom panels made of the same wood were then fixed in place, covering the newly placed beam.

As the length of the rafters and beams was over 14 feet, entire logs of Burma teak of adequate length had to be procured from Mangalore and were then cut to the size and length required, without having to provide any joints in the structural timber members. They were given the required anti-termite treatment before being fixed in place.

Exterior Façade Restoration

A detailed condition assessment was conducted on one bay of the external façade. During the removal of the existing wall plaster, multiple layers and material combinations were identified, and samples were collected. These included areas with complete cement plastering, areas with complete lime plastering, and locations where cement was applied over lime plaster. Following this assessment, the walls were fully re-plastered using lime mortar after carefully removing the existing lime plaster. The RCC band of the façade revealed significant structural issues, including large cracks, which were thoroughly documented. For the wider cracks, ranging from 2–4 inches to 1–4 feet, stone stitching was carried out, and loose brick masonry was replaced through brick filling to restore structural integrity.



Restoration of Stucco Works in the Façade

The stucco works on the façade were meticulously restored following documented original designs, with all decorative elements recreated to preserve their historical character. Rectangular and circular column capitals were executed by skilled sthapatis, while door and window cornices, keystones, and brackets were crafted with precise attention to measurements and detailing. All restoration work was carried out using traditional lime mortar, ensuring material authenticity and long-term compatibility with the existing structure. Highly skilled labour ensured fine workmanship throughout, maintaining both the ornamental richness and structural integrity of the façade. The completed restoration successfully preserves the heritage building's aesthetic character, authenticity, and historical significance.

Church Interior

Similar to the exterior façades, condition assessment of the plaster was carried out in the interior of the church. As cement plaster was found in several areas of the church causing deterioration of the surrounding lime plaster and the underlying bricks—as cement plaster traps moisture from capillary action from the ground—the plain wall plaster was entirely removed and re-plastered with two layers of lime plaster. The decorative plaster was retained, and patchwork was done as required. Similarly, as the pedestals of the circular columns were entirely cement plastered, it was carefully chipped to expose the brick and redone with lime mortar. One of the largest challenges faced during the conservation process was the restoration of the reinforced concrete slab of the ceilings of the aisles of the church. The RC slab was introduced in the mid-20th century following the collapse of the Madras terrace, and over the decades, significant deterioration of the steel reinforcement was observed, therefore requiring additional reinforcement to be provided. After the cover concrete was removed in the areas where it was loose, exposing the reinforcement, based on the recommendations from the technical consultant and expert team advising on the same, as the reinforcement corrosion was over 30%, several trials of providing additional reinforcement were done to determine an ideal solution, and based on the outcomes, it was decided to provide shear connectors to which the reinforcement would be tied and then micro-concreting done to match the same level as the surrounding slab soffit. While this procedure was for the east aisle, for the RC slab above the west aisle, it was observed through condition assessment that the cement plaster applied below the cover concrete was weak, whereas the latter was much stronger and did not require the same methodology. Hence, the loose cement plaster layer alone was removed throughout the length of the slab, and re-plastering was done to achieve an even surface.

The nave ceiling with the ornate papier-mâché had received several coats of paint over the years, making the details slightly obscured. In certain areas where parts of the papier-mâché had detached and were missing, they were recreated using plaster of Paris, and a single coat of emulsion was painted over the ceiling

For the doors of the body of the church, the shutters were retained, and maintenance of the required damages was done. Two doors, which were significantly deteriorated, were remade with Burma teak wood. As several of the original hinges had been damaged with wear and tear, causing improper closure, all the hinges of the doors were removed and replaced with heavy brass hinges with stainless-steel coating. The paint layers were carefully removed through the use of paint remover, scraping, and buffing, ensuring that the mouldings were retained, and after the surfaces were evened through wood putty, the doors were repainted and fixed with the new hinges to the frames.

As all the electrical and audio/video cables have been concealed below the flooring, the joints of the Cuddapah and granite stones were carefully cut and the stones removed. The underlying brick and lime mortar were excavated to a depth of one foot. After the stainless-steel raceways were laid, a layer of river sand over which lime mortar and brick bats were laid and compacted, the stones were then re-laid in lime mortar. The varied granite, Cuddapah, and marble flooring was then polished.

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Site Engineer

SAINT GEORGE
THE MARTYR

St.George's Cathedral through the ages

Photo of St George's Cathedral, Madras, 1890.

WATERPROOFING

PROTECTIVE ROOF WATERPROOFING:
INSULATION COATING SYSTEM





Waterproofing a heritage roof requires a careful balance between preserving the historical integrity of the structure and ensuring modern waterproofing standards. Based on two decades of technical expertise and responsibility, a comprehensive hybrid system was engineered as per the site's requirement, with elastomeric properties, high durability and excellent breathability while remaining fully waterproof and insulated even under extreme weather conditions:

I. **Initial Assessment and Planning**: A comprehensive, non-invasive inspection of the existing roof was conducted to diagnose the issues, and determine the original construction methods. A detailed study was conducted to grade the condition of roof substrate, slope and design. The findings were recorded and specification was engineered for long-term benefits.

II. **Roof Restoration Methodology**:
   a. *Surface Preparation*: Manual labour with a specialised mechanical surface scrubber was used to remove existing tar felt and its residue from the entire terrace. Followed by this, the substrate was made absolutely clean, dry and free of any contaminants to take on further treatment.
   b. *Surface Cracks and Detailing*:
      i. RCC Section: The deep surface cracks and weaker section were treated with polymer-modified repair mortar, followed by treatment of the surface cracks with high elongation sealant, strengthened with single reinforced epoxy lining system.
      ii. Lime Section: The deep surface cracks were effectively treated by Edwin Construction using the traditional stitching method. Later those sections and minor surface cracks were strengthened and protected using the single reinforced epoxy lining system.
   c. Intersections and Terminations: All intersections, including the parapet wall to roof, sunshade to external wall, horizontal projections on the spire wall, metal sheet to lime structure, down intake pipes and weaker sections were strengthened and protected with a single reinforced epoxy lining system. This system can withstand high abrasion and impacts without failure.
   d. Entire Roof Area: A proprietary four layer liquid applied hybrid coating system has been implemented to provide complete waterproofing and insulation to the treated substrate even under extreme weather conditions.

Our Mission is to protect and preserve heritage structures through specialised roof waterproofing solutions that honour historical authenticity while ensuring long-term durability, sustainability, and structural integrity. We are committed to using minimally invasive, conservation-friendly methods that safeguard legacies for future generations.

Mr. Ashik Ahmed Ali

Mr. Syed Ilias

SAINT GEORGE
THE MARTYR

St.George's Cathedral through the ages

Platemarked Sepia, Processed In Saxony (in Stamp Box),
Published By Spencer & Co., Ltd., Madras 1900

ANTIQUITIES & ARTEFACTS IN THE CHURCH

Bishop Daniel Corrie
the first Bishop of Madras

One of the key components of this project was the conservation and restoration of treasured antiquities at St. George's Cathedral. These included memorial stones, metals, mosaics, stained-glass windows, and other artefacts.

In 2012, Dr. V. Jeyaraj, Director of the Hepzibah Institute of Heritage Conservation, was requested by Dr. M. S. Mathews, then Professor and Head of the Department of Structural Engineering at IIT Madras, to submit a report on the condition of the Cathedral's memorials, along with recommendations for their conservation and restoration. When the project was revived in July 2024, Professor Arun Menon, the current Head of the same department, once again approached Dr.Jeyaraj for his expertise.Dr. V. Jeyaraj, a scientist specialising in heritage conservation and former Curator of Chemical Conservation at the Government Museum, Chennai, collaborated with Mr. Arun David Ambrose, Secretary of the Cathedral Pastorate Committee, and conservation expert Dr. S. Madhan to define the scope of work. The project aimed to safeguard antiquities such as marble statues, tablets, metal plaques, the podium, bells, and stained-glass windows, of the church.

The Hepzibah Institute of Heritage Conservation, located at 21, VOC Street, MGR Nagar, Chennai – 600078, was established on March 8, 2009. Its mission is to conserve and restore heritage art objects and materials. The Institute also provides training in heritage conservation and restoration, offers consultancy services, and undertakes research and publication activities.At St. George's Cathedral, one workshop each on metal and marble antiquities, and four workshops on stained-glass conservation and restoration, were conducted to provide hands-on training in preservation techniques. Analysis played a key role in the process, with all materials examined using an XRF Analyzer. The conservation team included archaeologists, epigraphists, conservators, stained-glass technicians, and artists, most of whom had trained under Dr. V. Jeyaraj.

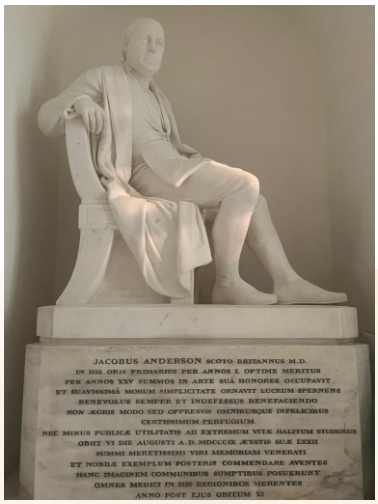
Dr V Jeyaraj
Hon. Director-Hepzibah Institute of Heritage Conservation

Mr S Srinivasan
Stained Glass Restoration Expert

Marble Memorials

Marble was widely used in Europe for sculpting figures and plaques, and St. George's Cathedral houses marble sculptures of many eminent personalities. At the left entrance stands a statue of Rt. Rev. Daniel Corrie, the first Bishop of Madras (1835–1837). Associated with numerous schools, he is depicted with an open Bible, blessing an Indian boy dressed in a loincloth, sacred thread, and tuft. The main entrance features a bas-relief of Rt. Rev. Thomas Dealtry, Bishop of Madras (1849–1861), shown blessing two young priests, accompanied by his son Archdeacon Dealtry, Rev. Lugard, and Rev. Murphy. Near the Lady Chapel entrance stands the bust of Rt. Rev. Frederick Gell, Bishop of Madras (1861–1899), while nearby is the alto-relief statue of Reginald Heber.

Several memorials were erected in honour of British soldiers, religious leaders, educationists, police officers, engineers, businessmen, judges, medical officers, and their families. One tablet commemorates Rt. Rev. Robert Caldwell, who devoted 53 years to spreading the Gospel among the Tamil people of Tirunelveli. Renowned as a scholar and philologist, he also served as Assistant to the Bishop of Madras and passed away in Kodaikanal in 1891. Another tablet records that Frederick Rowlandson served as Registrar of the Diocese of Madras for 53 years and died in 1929, while a plaque for Edward Sell, Canon of St. George's Cathedral, notes his 67 years of service in Madras before his death in 1932 at the age of 93. John Mousley, the first Archdeacon of Madras (1815–1819), is commemorated by a tablet sculpted by Flaxman. Most of these memorials were created by English sculptors, with a few crafted by Indians.



The Cathedral houses 38 memorials, primarily statues and plaques made from marble, ceramic, and alabaster. The marble plaques bear engraved inscriptions filled with black or red paint, often mounted on granite or Cuddapah slabs. One notable memorial is rendered in stone mosaic, an art form that uses small pieces of coloured ceramic, stone, or other materials to create decorative or symbolic imagery.

The altar piece, made of alabaster, depicts the Ascension of Jesus Christ. This large reredos features a standing sculpture of Jesus holding a sickle, flanked by two angels, with a smaller black statue of St. George slaying a dragon above. Alabaster, a fine-grained sedimentary rock composed primarily of gypsum, displays unique vein patterns and colour variations due to minor mineral impurities such as iron oxides.

Although the marble memorials, statues, and plaques are regularly cleaned, dirt has accumulated over time due to moisture, dust, salt efflorescence, paint spills, and oil deposits. Some portions have eroded or been scratched, tablet edges have broken, and several inscriptions of sculptors' names and company details have faded. White paint residue were also found along engravings, and some plaster-bonded sections had separated or cracked, with a few pieces missing entirely. The total surface area of the marble memorials and plaques is approximately 140 sq. m.

Metallic Antiquities

The Cathedral possesses several copper-based antiquities such as brass memorial plaques, bells, church utensils (including wine cups, flower vases, crosses, handrails, and the pulpit). Brass, an alloy of copper and zinc, often incorporates engravers' ink, but is susceptible to corrosion in humid conditions. The corroded copper gives a greenish patina, leading to ink loss. Most brass plates were found in a corroded state, with oily residues from brasso accumulation near bolts. The total surface area is approximately 12 sq. m. The newer additions (installed in 1947 and 2010) remain in good condition.

The brass pulpit, regularly cleaned with brasso, showed blackened grooves on the eagle figure due to incomplete removal of the polish. The Cathedral houses eight bells, manufactured by Messrs Mears & Stainbank, Founders, London, in 1871. The largest bell measures 4 feet in height, 48 inches in diameter, and approximately 150 inches in circumference; the smallest measures 2 feet in height, 30 inches in diameter, and approximately 94 inches in circumference. These bells are installed within the central portion of the pinnacle, about 50 feet above ground level, mounted on one-foot-thick wooden beams in two tiers of four bells each. Made of bell metal (a copper-tin alloy with a higher tin content than bronze), they form a musical set operated by ropes. The total area is approximately 20 sq. m.

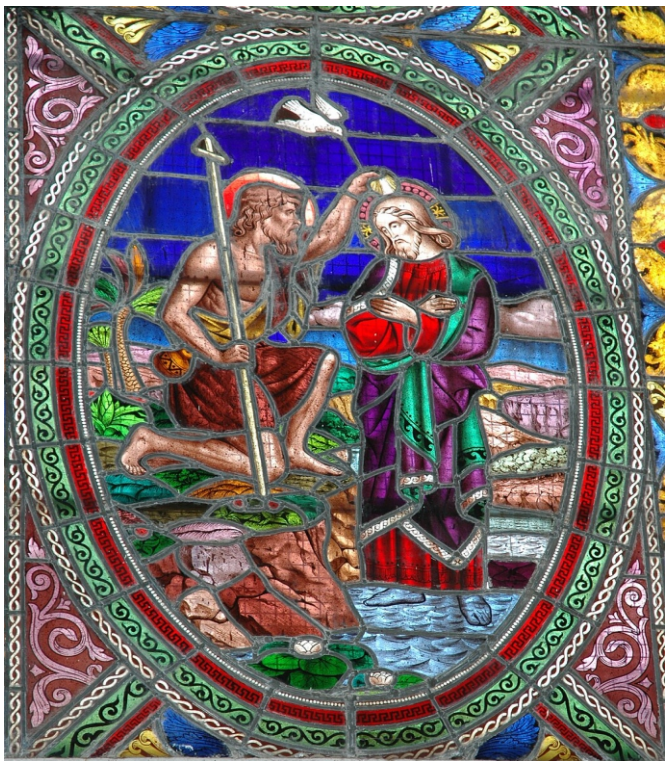
Three additional bells attached to the clock, painted silver, were found to be corroded and in need of restoration. High moisture levels had accelerated corrosion, resulting in bluish-green copper chloride deposits and accumulated dust.

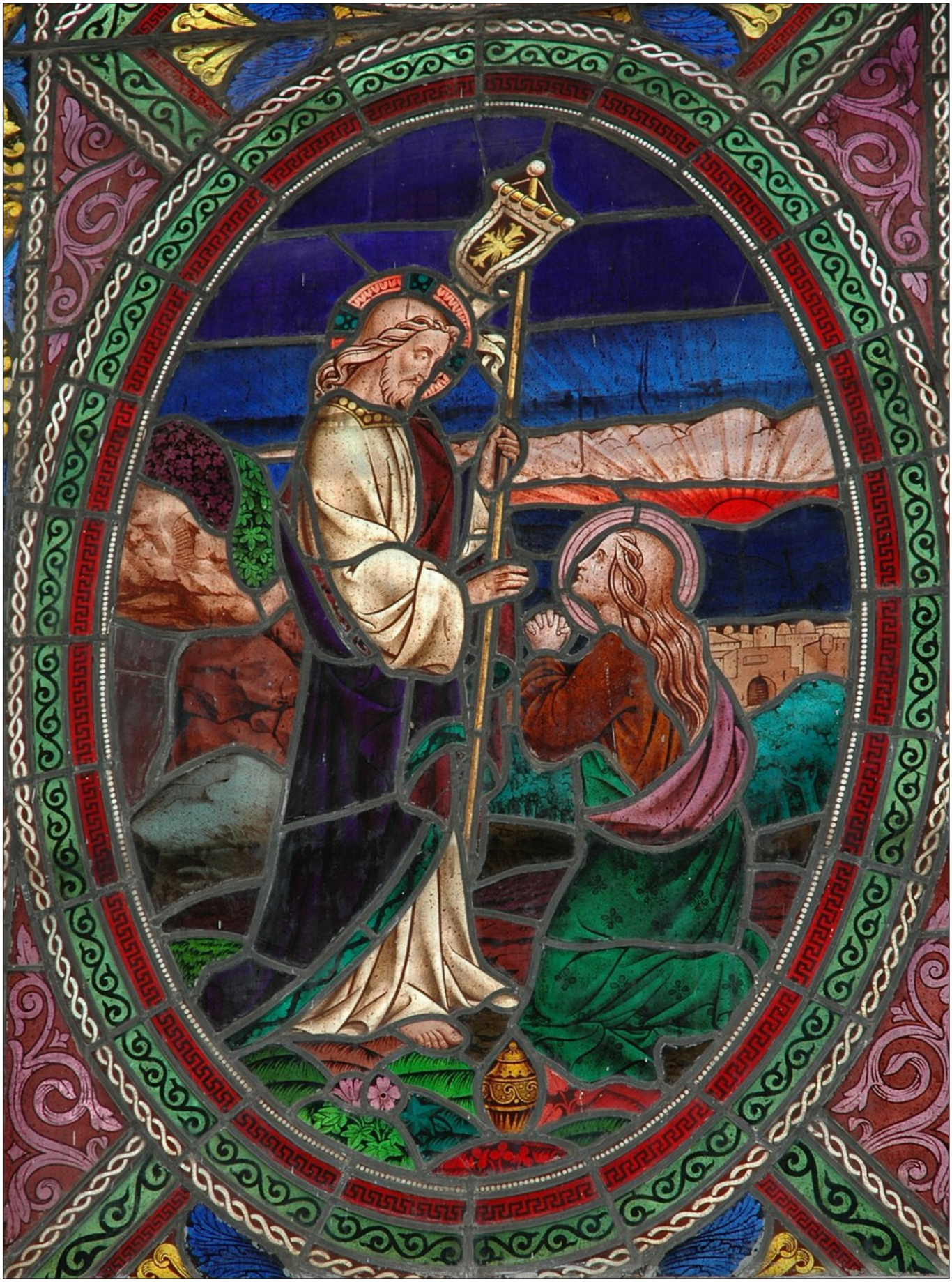
Stained-Glass Windows

Stained glass windows are crafted by arranging small pieces of coloured glass held together with lead strips (cames), with painted details and silver stains fired to fuse the colours.

The stained glass windows of St. George's Cathedral are remarkable in their artistry. On either side of the altar, two vibrant panels depict key moments from the life of Jesus: the Baptism of Christ by John the Baptist in the River Jordan (with the Holy Spirit descending as a dove) and the Resurrection, showing Jesus with Mary Magdalene. Smaller stained-glass panels adorn the transoms above the Cathedral's doors.

Three types of stained-glass panels are found: large altar windows (510 × 150 cm), twenty upper wall panels on either side of the nave (163 × 110 cm each) and twenty-six semi-circular panels above doors and windows (163 × 85 cm each). Two panels had broken and been temporarily covered with plywood; others were cracked or had lost sections entirely. The total stained-glass surface area is approximately 110 sq. m.





Restoration Treatment of Marble Memorials

The removal of accretions was planned carefully to ensure that no chemicals used during cleaning, conservation, or restoration would damage the memorials. The process included several stages: physical dusting, dry brushing, cleaning with distilled water, washing with *Extran* (a neutral soap solution), gentle abrasion with pumice stone powder (an extrusive igneous rock that softly removes surface accretions), and finally, an application of 5% hydrogen peroxide solution. After cleaning, each memorial was rinsed with distilled water and dried thoroughly.

During ongoing civil work, the cleaned memorials were protected with soft, cushioned plastic sheets and covered with thick plywood enclosures to prevent damage. Once the civil work was completed, the coverings were removed, and any residual dirt or lime wash was cleared using distilled water and a brush, followed by light abrasion with pumice powder and hydrogen peroxide application. A 0.5% solution of Paraloid B-72 in a benzene–toluene mixture was then applied as a protective coating to guard the memorials against environmental effects.

Restoration of Marble Memorials

Over ten memorials were found broken, and two were affected by salt efflorescence. Salt-contaminated areas were treated by poulticing with neutral paper pulp and allowed to dry. Once removed, the salts absorbed from the marble were dissolved with distilled water. This process was repeated until no chloride traces were detected in the washings. After complete removal of the salts, the surfaces were wiped with distilled water and dried using soft cloths. In some cases, multiple poultice treatments were required to eliminate stains entirely.

Oil accretions from human touch and microbial growth were cleaned using organic solvents such as ethanol. Broken and missing portions of marble memorials were restored using resin as a fixing agent. The joints were retouched with acrylic colours matching the surrounding stone. Where decorative designs had fallen or gone missing, new moulds were created by referencing similar memorials, and the reproduced designs were fixed onto the originals.

Treatment of Alabaster and Mosaic Memorials

The alabaster decorations on the altar were cleaned with a mild acetic acid solution, followed by an ammonia wash and a final rinse with distilled water. Stained areas were treated with pumice powder and gently brushed. The mosaic plaque, composed of ceramic pieces, was generally in good condition but covered with dust, dirt, stains, and paint deposits. After cleaning, the mosaic panels depicting the birth of Jesus were restored to their original clarity and colour vibrancy

Treatment of Brass Plaques and Pulpit

Loose brass plaques were immersed in a 5% lemon juice or citric acid solution, then brushed, rinsed thoroughly with distilled water, and dried. This method effectively removed corrosion and restored surface sheen.

The brass pulpit, composed of three sections—the base stand, the eagle, and the reading platform—was dismantled, and each component was immersed in a suitable solvent to remove corrosion. The lower section and the eagle figure were soaked in a lemon juice solution, then brushed, washed with distilled water, and dried. Finally, they were polished with brass polish. Smaller metal objects such as lamps, flower vases, crosses, and other church vessels were similarly treated.

Treatment of Bells

Dust was first removed from the bells using a dry brush, followed by cleaning with distilled water. Dirt and fungal growths were eliminated with ethanol. Corrosion products such as copper chloride were treated using ammonia, which reacts to form a copper-ammonium complex. The bells retained a uniform patina of copper oxide and carbonate, preserved for their antique finish.

The three bells located in the uppermost tier of the spire, originally coated with silver paint, were cleaned with ammonia, washed with distilled water, and then given a protective coating of 0.5% Paraloid B-72 solution in a benzene–toluene mixture.

Treatment of Stained-Glass Windows

In the early 21st century, several stained-glass windows were found damaged and replaced with imitation stained-glass panels. These replacements accumulated dust, dirt, and paint drippings over time and required cleaning. Five imitation stained-glass panels were severely damaged and were removed, cleaned, and restored by joining broken glass pieces, refitting flat lead cames, and sandwiching the designs between annealed glass sheets.

The original stained-glass windows above these imitation panels were found with cracked or broken glass and damaged, twisted lead cames. These were dismantled and restored. Broken glass pieces were removed, designs were redrawn and fired in a kiln, and the restored sections were reinstalled in their original positions. Gaps were filled with putty to prevent water ingress. Lead cames were blackened with paint and securely fixed to the iron framework of the windows.

Initially, it was believed that the three main stained-glass windows could be restored *in situ*. However, closer inspection revealed heavy deposits of dirt and corrosion on the exterior, along with cracks, missing pieces, and deformed cames. The panels were therefore removed and laid on specially prepared worktables for restoration. After cleaning with brushes, distilled water, and *Extran* (a neutral soap solution), damaged glass was removed and replaced. Designs were redrawn and fired multiple times, as some panels required up to three firings to properly fuse layered pigments. Cracked larger pieces were stabilised with lead cames to retain the original glass.

Almost every panel had edge damage, requiring new edge pieces for reinforcement. Stainless steel supports were fabricated to hold the panels firmly. The lower panel of the central stained-glass window was made removable to provide access to lighting installed behind the reredos.

Remarkably, the restoration of the stained-glass windows was completed within six months, a record timeframe for such work, which typically takes between one and two years.

Restoration Team

The restoration team included:

- Keerthana Murugasen – Supervising Conservator
- Nathani Ponnaiya – Conservator
- P. Annamalai, S. Srinivasan, and Patric – Stained Glass Experts
- Dr. S. Madhan – Conservation Expert and Restorer
- Miss Meera and V. Vijayabalan – Sculptors

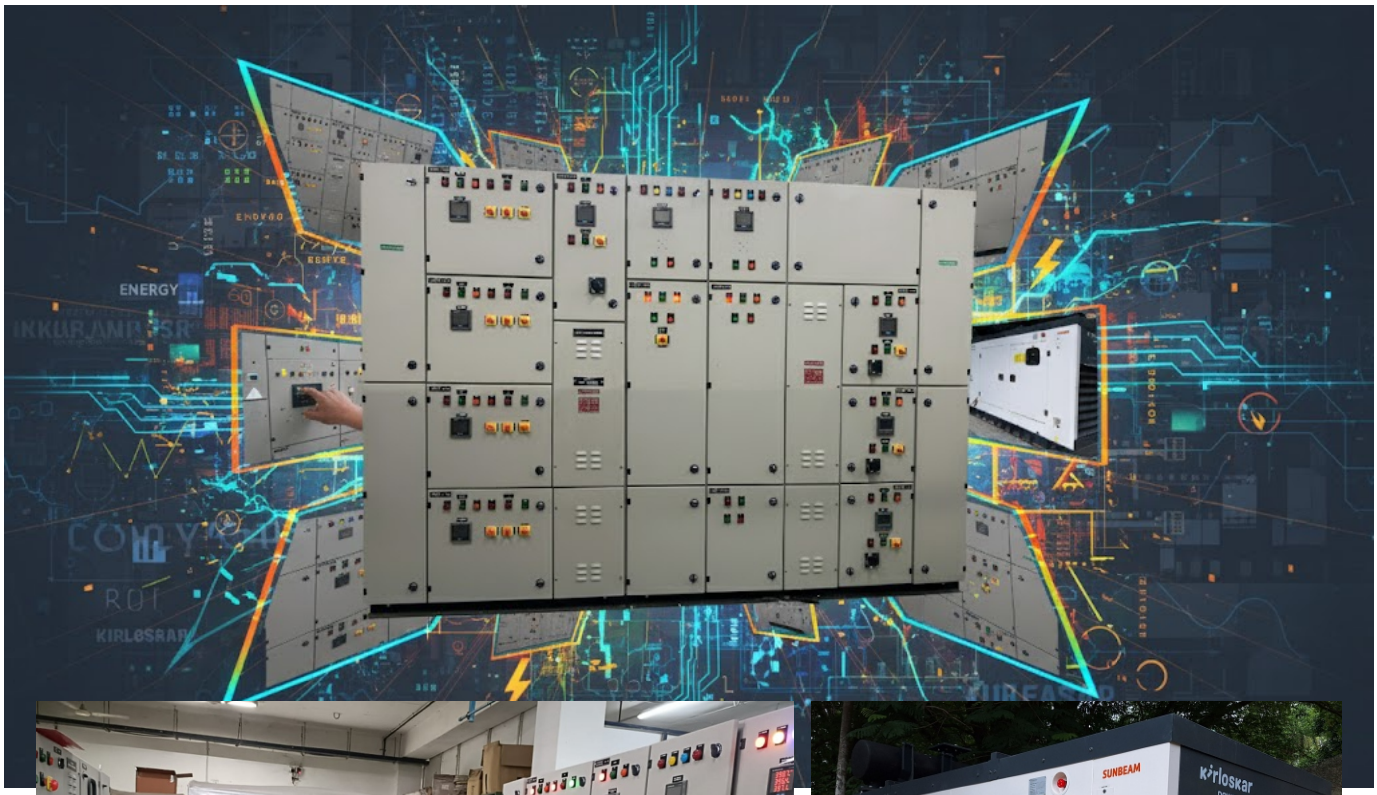
List of staff and experts in the photo

1. N. Pavithra Devi - Conservation Assistant. 2. A. Ajitha - Conservation Assistant. 3. Arthima. S - Conservation Assistant. 4. Anitha. K - Conservation Assistant. 5. Mona Ramani. M - Conservation Assistant. 6. Nista Sowndarya. S - Conservation Assistant. 7. G. Nathani Ponnaiya - Conservator. 8. S. Mahathi – Intern, Conservation Architect. 9. S. Srinivasan - Stained Glass Expert. 10. Dr. V. Jeyaraj - Director of Hepzibah Institute of Heritage Conservation. 11. M. Aachin - Conservation Assistant. 12. Rahulan - Conservation Assistant. 13. G. Sivachandran - Conservation Assistant. 14. S. A. Srinivasan - Conservation Assistant. 15. Prakash, R - Conservation Assistant. 16. Rajesh. R - Conservation Assistant. 17. R. Achuthan - Artist

ELECTRICAL
SYSTEMS

SPONSORED BY
RAJAH SINGH & SAM PRASAD

UPGRADATION
OF THE
ELECTRICAL SYSTEM



During the restoration of St. George's Cathedral, the electrical system within the church, as well as the main electrical distribution, were upgraded as extensively as possible. The sprawling campus of St. George's Cathedral extends from Cathedral Road in the front to Avvai Shanmugam Salai (formerly known as Lloyd's Road) at the rear. The electric power supply from TANGEDCO, the state's electricity supplier, is fed from both Cathedral Road and Lloyd's Road, with multiple tariff meters.

Earlier, a 62.5 kVA DG set was used to provide backup power to the church and parish hall in case of failure of EB supply. The electrical contract was executed by Kevin Electricals Pvt. Ltd., with consulting provided by Sivachi Engineers and Consultants.

The electrical system inside the church mainly comprises the lighting, power socket system, fans, audio and video system, and air conditioners in the altar area and vestry. The entire wiring system, along with the distribution boards, has been replaced. Exposed conduits were replaced with a concealed raceway system wherever possible. Some of the chandeliers inside the church installed at a later date were different from the heritage type of the others. These were replaced with newly fabricated chandeliers designed to match the existing heritage ones so that they appear identical.

A larger number of power sockets have been provided within the church and at the porticos for convenient usage without excessive loose wiring. Although DG backup power has been provided to support the church's electrical loads, there would be a brief interruption in lighting and the audio-video system whenever EB supply failed before the DG starts automatically. To prevent this, UPS power has been provided for the internal lighting of the church, with battery backup ensuring continuous lighting until the DG starts. Similarly, the audio and video system has been equipped with an independent UPS to function without interruption. Existing fans have been reused after servicing and the incorporation of new bearings.

The bulk of the power supply for the church campus is provided from the Lloyd's Road EB feeders. To augment backup capacity, a new 125 kVA DG has been added, making DG backup power available to almost all loads. The existing EB panel was replaced with a new one. The 62.5 kVA DG panel was replaced with a new DG changeover panel accommodating both DGs. A PLC-based automatic operation has been installed to start the required DGs and supply the loads. A conventional hard-wired automatic system has also been provided to perform basic functions in the absence of the PLC. Automatic Transfer Switches (ATS) supply either EB power or DG power, depending on availability.

For wedding receptions or other functions outside the church building, a portable DG set was previously used. With the augmented DG capacity, it is now possible to supply the necessary power in-house. To facilitate this, two feeders have been extended from the new DG changeover panel to terminating boxes near the stage area.

The electrical distribution in the security cabin near the main gate has been upgraded with new distribution boards and power supply panels for façade and area lighting. An ATS has been incorporated at the pastor's house to supply DG power in case of EB failure. The existing lightning protection system for the church remains functional and has been retained. However, the altar area was not within its coverage. A new lightning protection system has been added to ensure complete coverage of the church, also serving as a backup to the existing system.


Mr Franklin Prabhu


Mr Paul Christopher


Mr Wilson Susai Raj


Mr A Yuvaraj

Mr K Suresh and Mr S Sivanandam

SAINT GEORGE
THE MARTYR

St.George's Cathedral through the ages

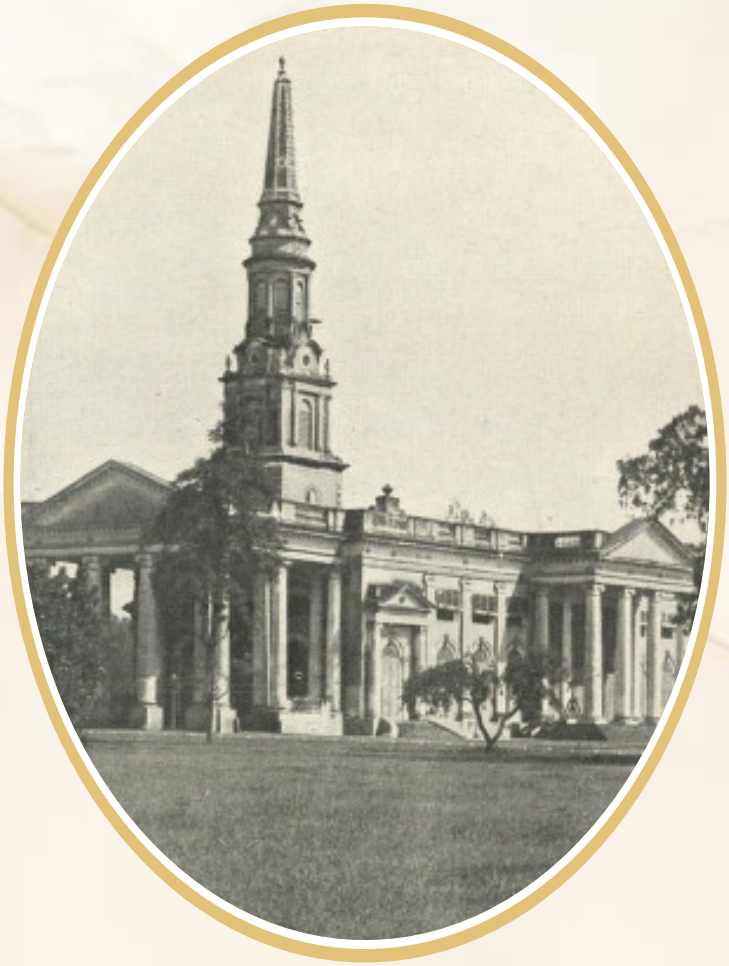
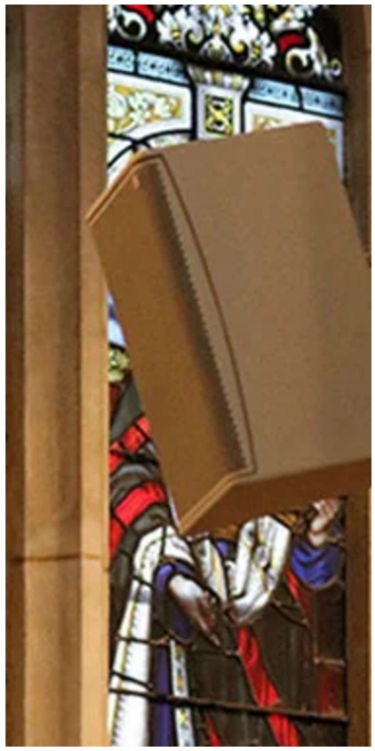


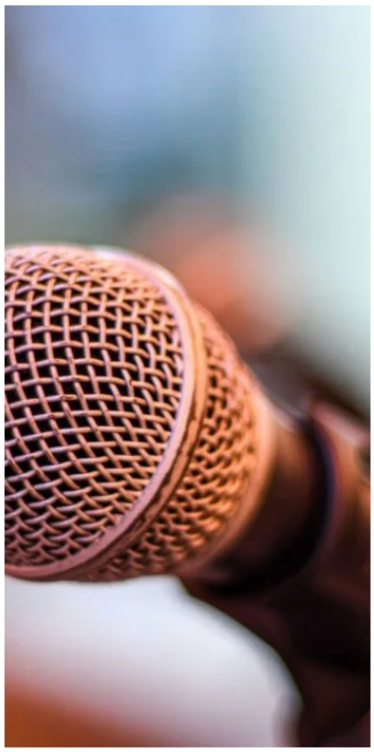
Photo of St George's Cathedral, Madras, 1906.

SOUND
SYSTEMS

SPONSORED BY
JENIX DEV SINGH

THE PUBLIC ADDRESS SYSTEM:
CREATING STATE-OF-THE-ART SOUND





Standing tall since 1816, St. George's Cathedral is one of Chennai's most cherished landmarks — a timeless blend of faith, history, and architecture. Its grand pillars and high vaulted ceilings have witnessed over two centuries of worship, music, and community. Yet, preserving such a legacy in a modern world requires care, especially when it comes to sound.

When Museek was invited to design the Cathedral's new audio system, the challenge was clear: to bring clarity and presence without disturbing the building's natural acoustics, or the quiet reverence of a place so laden with history. The highest priority was studying how sound travelled through the nave and around the arches by conducting a room acoustics test. Following this, Museek worked with the members of the congregation to understand the current requirements of the church as well as to future-proof it.

Considering the high risk of feedback issues, and to improve accuracy in pickup, hypercardoid dynamic mics were chosen. To maintain balance and intimacy, it was decided to use one of the most advanced slim column speakers in the world, designed for shorter throw distances and focused dispersion of sound — minimizing reverb and echo while blending seamlessly with the architecture. Paired with a state-of-the-art amplifier and mixer, chosen specifically for St. George's, the system offers raw power and precision tempered by warmth. Every word spoken and every note sung now carries with it both the clarity of modern design and the spirit of centuries past.

Through this thoughtful harmony of heritage and innovation, Museek has tried to contribute its bit to St. George's Cathedral.

Museek is passion made real by Daniel Donald, Dr. Jos Jasper, and Thomas, brought together by their shared passion for quality music and cinema. They have since worked together alongside their partners Anushiea Rose Jasper and Sharmija Molley Daniel to make their shared dream a reality. The team at Museek is dedicated to creating spaces where sound becomes emotion - immersive, precise, and deeply personal. Their work ranges from cozy home theaters and refined stereo setups to expansive open-air theaters, professional auditoriums, and now, the reverential sound system of St. George's Cathedral.

Sponsored by
Mr Jenix Dev Singh

Mr.Daniel Donald
Museek

SAINT GEORGE
THE MARTYR

St.George's Cathedral through the ages

1930 Postcard Catalogue
Printed In England

SAINT GEORGE
THE MARTYR

FAÇADE

LIGHTING

16 MILLION OPTIONS & COUNTING

Façade Lighting sponsored by Col David Devasahayam and family
In Memory of his late parents

MAJOR Y. DEVASAHAYAM
&
MRS KARUNAVATHY DEVASAHAYAM

The church was designed by Colonel James Caldwell and constructed under the supervision of Captain Thomas de Havilland of the Madras Engineers, East India Company. Its architecture was inspired by St. Martin-in-the-Fields, London, and features a 139-foot spire reminiscent of St. Giles-in-the-Fields, London.

Oscar, Ponni and Rahul Architects and the Church Restoration Committee Authorities approved Havells as the vendor for the Façade Lighting. Initially, it was tough to choose any one key feature to highlight, since lighting is creative work which knows no boundaries and the options are limitless. Eventually, it was decided to strike a balance between highlighting the architectural features and a bright wash for the Steeple. The Steeple has spectacular views from different locations, and the view from Anna Flyover is especially exquisite. Surrounded by lush greens in the heart of the city, like an Oasis in a desert, the outstanding landmark needs special attention when it comes to lighting.

Facade lighting includes choosing the right type of light to highlight architectural features, selecting an appropriate colour temperature (warm for traditional, cool for modern, or colour changing for special occasions), ensuring weather-resistant and energy-efficient (LED) fixtures, and using appropriate light levels to avoid glare. Other needs considered were mounting options like uplighting or wall-washing, integrating smart control systems for dynamic effects, designing for specific architectural styles and preventing excessive light pollution. LED light fixtures were chosen with various factors in mind - energy efficient, weather resistant, and creating the right visual impact. Overall, a system connect and communicate with the light fixtures was needed, to create special lighting and visuals during festivals and days of national importance. The products chosen are available in the Havells Professional Lighting Product Portfolio.

Havells' scope was to design and supply architectural light fixtures and support the Installation along with Kevin Electricals. The installation work was planned in conjunction with the restoration work, and in a manner to disguise the light fixtures during the day with expert guidance. The lighting scheme has dynamic options like warm white, cool white along with any other colours or themes as per the occasion. There are no limits to imagination, with the possibility of 16 million colours. After sunset, the Façade Lighting offers a strong aesthetic appeal, improving safety, visibility and differentiation.

Havells India Limited is a leading FMEG company with a strong global presence, manufacturing a wide range of electrical products for residential, commercial, and industrial use. It is committed to social responsibility, with initiatives in education, sanitation, and community development. Recognized for its sustainability efforts, Havells has been ranked in the Dow Jones Sustainability Index and maintains an 'A' rating in the MSCI ESG Rating. Havells is strengthened by its large inhouse manufacturing, focussed R&D efforts, digitisation and a deep pool of human talent. The in-house manufacturing, comprising 15 factories, ensures full control over quality, design and supply chain, alongside delivering all products at scale.

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A Victor
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S Nalini
Asst Gen Manager,
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Shanmuga Raja
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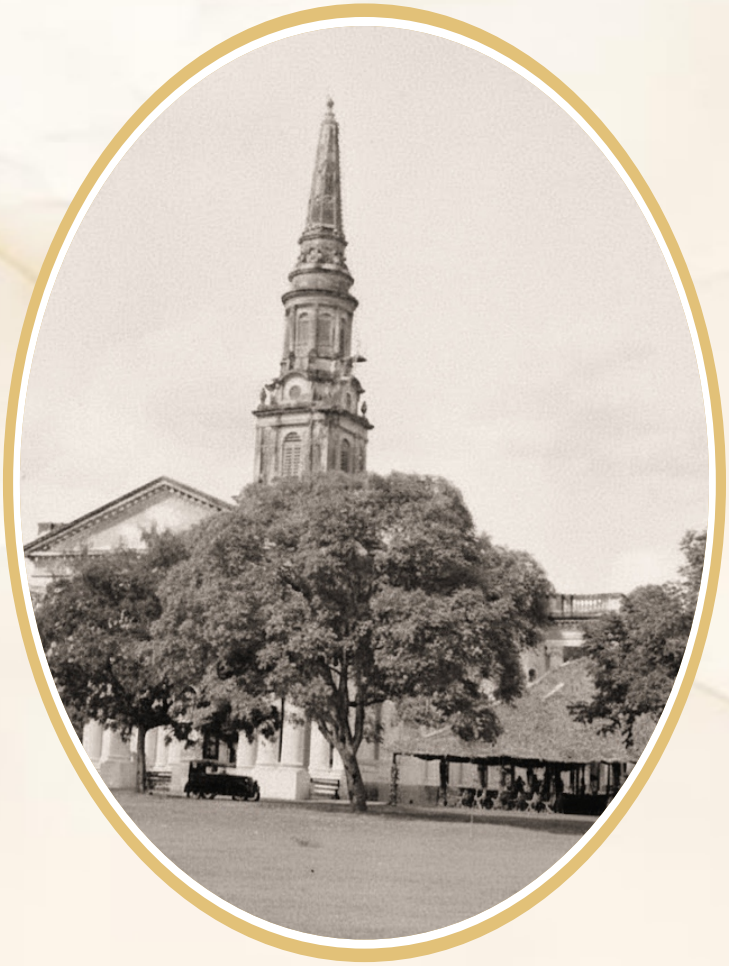


Pandal laid for the Inauguration
St George's Cathedral, Madras

LANDSCAPING
OF
ST.GEORGE'S CATHEDRAL

Landscaping sponsored by Col David Devasahayam and family

In Memory of his late parents

MAJOR Y. DEVASAHAYAM
&
MRS KARUNAVATHY DEVASAHAYAM

The serene landscaping around St. George's Cathedral is designed to reflect peace, harmony, and spiritual beauty. The lush greenery, vibrant flowers, and carefully planned gardens not only enhance the sacred surroundings but also create a space for reflection and prayer. In the Bible, gardens hold a deep spiritual meaning - from the Garden of Eden, where life began, to the Garden of Gethsemane, where Jesus prayed. Gardens are symbols of creation, renewal, and God's everlasting presence in nature. The Cathedral's landscaping echoes this timeless message, reminding every visitor that caring for nature is also a form of worship, and that in every leaf and flower, we see the grace of the Almighty.

The landscaping project of the restoration was helmed by Col David Devasahayam, Convenor, while Brig Albert Pakianathan coordinated and oversaw activities on the ground. Contributing to the project were Mrs Stella Alfred, Trustee and Dr Renuka David, a passionate nature-lover who devoted her time, effort and resources towards this cause. Professor Rajaratnam was the technical advisor. The contract was awarded to Mr Charles Xavier of Pools and Gardens.

One of the main concerns before the landscaping commenced was water stagnation and flooding in certain areas, which would affect the plants. These had to be rectified on priority.

Two pits and a well were required immediately, and a diagram and specifications were proposed by Prof Rajaratnam.

A normal septic tank was constructed for the Pastor's residence and the existing soakage pit dried out and used to pump in the rain water as a sump. Plumbing works for watering the garden were taken on by Mr Johny of Edwin Constructions, alongside patchwork on the curb wall. Edwin Constructions also examined the utility of the storm water drains near the entrance and the proposed well, including it into the project to ensure no flooding. The existing pipeline for water for the garden needed to be increased in size and the pressure checked. It was decided that the entire plumbing line had to be replaced.

The three ponds were retained, well-covered and maintained properly. There was a conduit for electrical wiring laid to illuminate them.

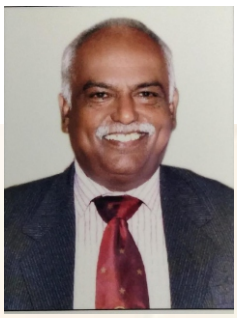
Reflectors were placed along the driveway for vehicles coming in at night. Mr Charles Xavier worked out the re-aligning of certain trees and plants to ensure symmetry in the garden. Mrs Stella Alfred suggested that plants of good quality could be relocated, such as those in the Pastor's house. The Ashoka trees on the Eastern side were trimmed so that the view of the Church is unobstructed. A couple of them were also relocated for symmetry.

Dr Renuka David contributed to the aesthetic requirements of the landscaping. Street lights and garden lights were installed to suit the requirements. The street lights were repositioned to avoid being blocked by the tall trees. For similarity, new poles were used. A prerequisite was that the lighting needed to have an old-world charm. Dr Renuka David chose pole lights that were ornamental, but of a vintage model. There were six Dynasty Midi lights, a set each for the main entrance and the two gates to the cemetery.

When the electrical lines were checked, it was realised that the entire wiring needed changing. The Convenor, Col David, magnanimously took it in his stride to finance this as part of the landscaping. Installation of these lights, planting trees and plants and final winding up of the civil engineering work was coordinated on a daily basis.

The entire project was made possible because of the combined effort of various agencies. The ground at St. George's Cathedral slowly grew into a stunning landscape with effective lighting and civil engineering to prevent water logging (while retaining its aesthetic beauty). The team worked jointly with experts, their efforts culminating in a beautiful garden as per the approved plan. They echoed the words of Rudyard Kipling in their deeds – *"Gardens are not made by singing 'Oh, how beautiful,' and sitting in the shade."*

People who contributed to the Landscaping of St. George's Cathedral



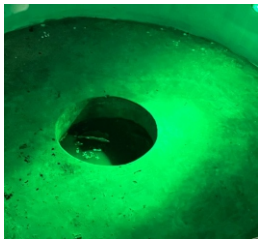
Brig Albert Pakianathan

Mr Charles Xavier

Dr Renuka David

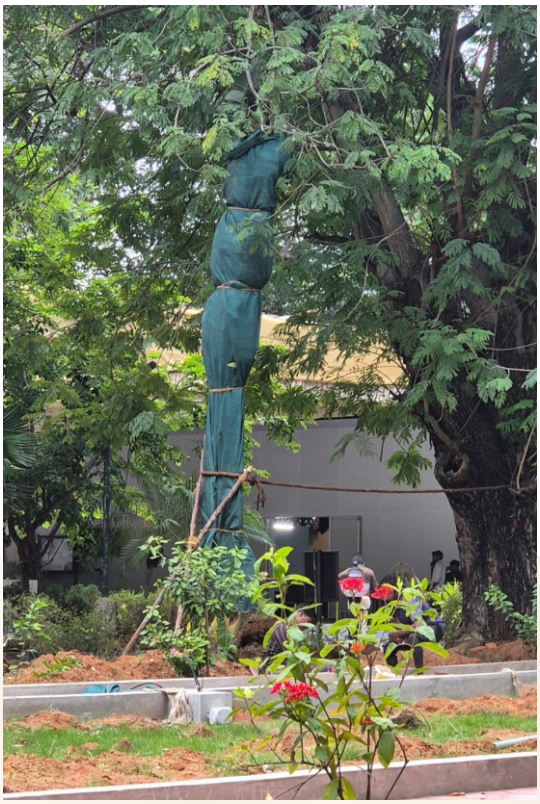
Mr S F Rajaratnam

Mrs Stella Alfred

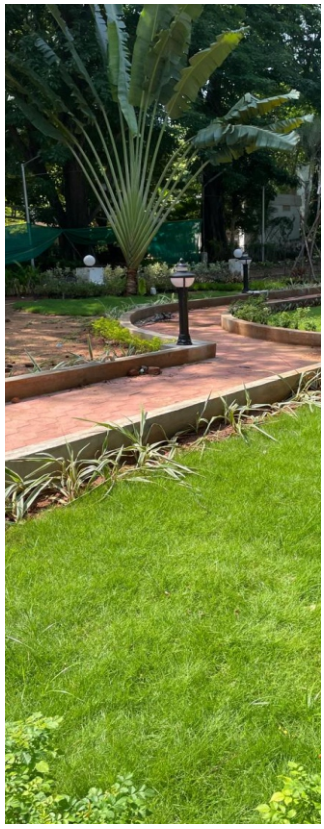


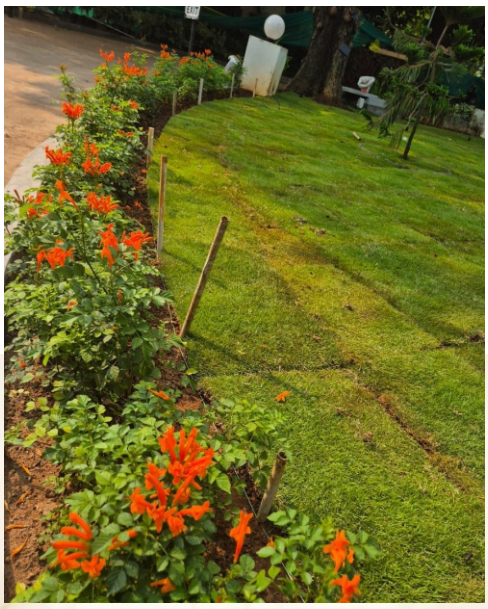
LANDSCAPING

Work in Progress



The lush garden at St. George's Cathedral





SAINT GEORGE
THE MARTYR

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Dr. Hannah Priyanka	Chandelier
Franklin Prabhu	Chandelier
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Samuel Baskaran	Chandelier
Dr. Samuel Prabhakar	Entrance Chandelier
Samuel Vijay Paul	Restoration of Altar Stained Glass
Dr.Mercy Rajasekar & Family	Restoration on Pulpit & Lectern
Jenix Dev Singh	Audio System - Speakers & Amplifiers
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Shandella Arun Ambrose	Spire Cross
Col. David Devasahayam	Façade Lighting
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	Restoration Bulletin & Coffee Table Book Printing
	Restoration Site-office Container
Dr. Renuka David	Garden Landscaping
Rajah Singh & Sam Prasad	Electrical System Revamp & Upgrade
	External & Internal CCTV System
Cathedral Youth Fellowship	Souvenir Cross

Names of the Building Committee Members
St. George's Cathedral

Rev. Dr. A. Ruben Jayakumar	-	Chairman/Presbyter
Rev. Indira Paul	-	Associate Presbyter
Col. David Devasahayam	-	Convenor
Mr. Arun David Ambrose		
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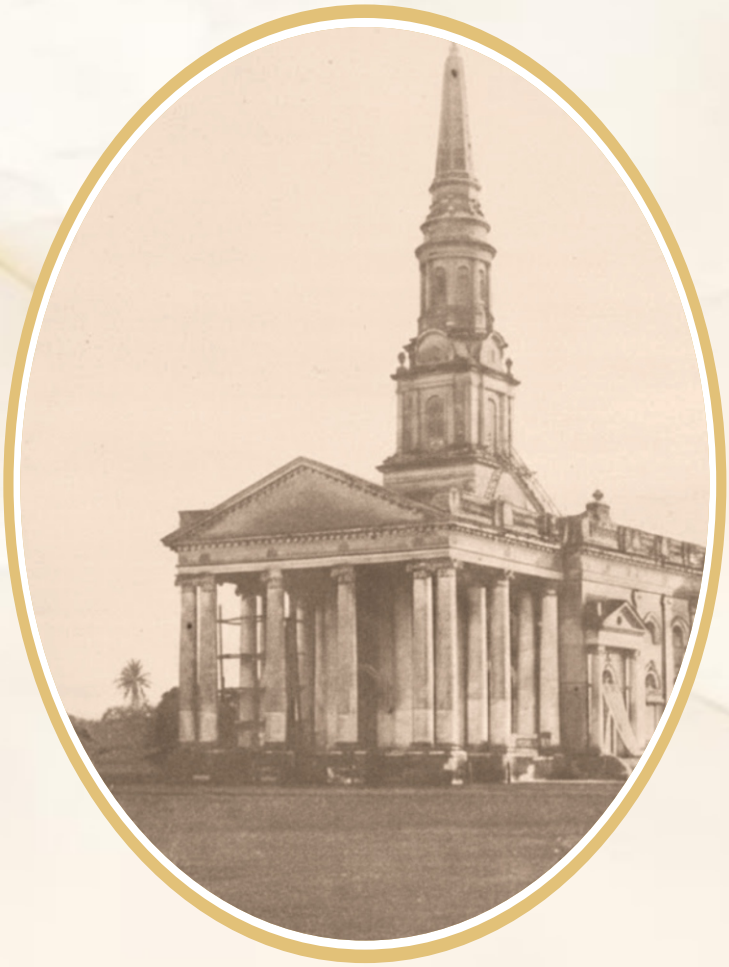


undated photo of
St George's Cathedral, Madras

SAINT GEORGE THE MARTYR

ST.GEORGE'S CATHEDRAL

CATHEDRAL RESTORATION PRAYER FELLOWSHIP

"Let us start rebuilding"

– Nehemiah 2:18

The Cathedral Restoration Prayer Fellowship was formed in January 2025. The group consisted of men and women of all ages from the different fellowships of our church. The purpose of this forum was to pray with one mind for the renewal of the church building as well as the Congregation, it's Body.

The following are the members of the fellowship.

Dr. Amritha Samson	Ms. Gillian Mc Kenzie	Mrs. Mallika Surender (Convenor)	Dr. Shanthakumar Hopper
Mr. Charles Jayaseelan	Mrs. Ida Prem	Mrs. Nalini Williams	Mrs. Sheila Joseph
Ms. Cheruba Devaraj	Mr. Jerome Sudhakar	Mr. Paul Jayakar	Dr. Sudha Samuel
Mr. Chittaranjan Soundarapandian	Dr. Kim James	Mrs. Rachel Moses	Mr. Vijay Jesudasan
Mrs. Creshanthi Lamech	Mrs. Latha Chittaranjan	Mrs. Ruth Mohandoss	Mr. Y.E.A. Raj

It was our belief that the group should have a Vision and Direction to guide us in our prayers. The theme and key motivational verse was drawn from **Nehemiah 2:18, "Let us start rebuilding"**; that was an excellent place to start our ten month prayer journey, which began on 18 January 2025, and ended on 25 October 2025.

The Cathedral Restoration Prayer Fellowship met four times in a month. Two meetings were in person which were held in the church, and two were online. The frequency of the meetings helped the group to stay connected and focused. The sessions commenced with Praise and Worship, followed by a study of the Word of God, and ended with prayers. Each member was given an opportunity to share the Word of God. The members were requested to set aside 15 minutes every day for dedicated prayer. During February'25 and March'25, we had Altar prayers inside the church. We also had a few Prayer walks where we walked around the church and spent time in prayer.

As the saintly man of God, C H Spurgeon said, "the Wealth of the Church lies in the Power of prayer". It was encouraging to see God answering our prayers. We would like to share a couple of examples. First, there was a prayer request for the procurement of large quantities of Burma teak which were not readily available in the market. However, very soon procurements were made, and the work continued. Second, restoring and recreating the Stained Glass was a challenging and arduous task, and there were huge delays in timelines, which were successfully overcome.

A very practical offshoot of the Cathedral Restoration Prayer Fellowship was the formation of a team of seven ladies and two men to make sure that the Originality, the Uniformity, and Aesthetics, of the Neoclassical architecture of the church was strictly maintained.

Ms. Cheruba Devaraj
Mrs. Hannah Priyanka
Mrs. Nalini Williams
Mrs. Pauline Jagadish
Mrs. Rajeshwari Teli
Mrs. Ruth Mohandoss
Mrs. Tryphena Kirubakaran
Mr. Surender Joseph
Mr. Vijay Jesudasan

In conclusion, I would like to quote from the song 'For I am building a people of power', and my prayer is the last stanza of the song.

Build Your Church, Lord,
Make Us Strong, Lord
Join Our hearts, Lord, Through Your Son
Make Us One, Lord
In Your Body
In The Kingdom Of Your Son. Amen

Mrs. Mallika Surender
(Convenor)

Where Heaven Meets Stone

Jasper Sandeep Rajasekar

The restoration project of St George's Cathedral is nearing completion - the scaffolding is almost down, the stone cleaned, the colours revived. This has not happened overnight. It has taken the hard work of many hands - planners, craftsmen, donors, volunteers, and every person who contributed in prayer and effort. Together, they will have given us not just a building, but a living reminder of faith renewed. And that makes today's writing all the more fitting:

Our restoration took two years in the making.
Now imagine it taking…
Fourteen years…
Forty years…
Or even **longer than your lifetime!**

Today, I want to take you on a journey through three stories, about three men who built for God. They lived centuries apart, never met each other, but they all left behind masterpieces that still speak today. And, as you'll see, they had a few surprises up their sleeves… and scaffolding.

Act 1: Michelangelo – The Reluctant Painter

It's 1508. Pope Julius II calls Michelangelo into his office. "Michelangelo," he says, "you're the greatest sculptor in the world. So, naturally, I want you to paint the Sistine Chapel ceiling."

The Chapel is roughly the size of Solomon's temple (1 Kings 6) - its dimensions were deliberately planned. It is no ordinary chapel. It is where the papal conclave gathers every year to elect the new Pope, the head of the largest single Christian denomination in the world and arguably the largest organisation in the world. This is the spiritual starting point for every Pope to this day and it is the very representation of the continuity of the Church's authority since Apostle Peter took up the mantle.

Michelangelo is stunned. Yes, his Pietà and David sculptures astonished Rome and Florence - "But…" he resists. "But… I'm a sculptor!" Perhaps Michelangelo's rivals were involved - Bramante, the chief architect of St. Peter's Basilica, and Raphael - hoping he would fail at fresco painting.

The Sistine Chapel Ceiling

After the initial resistance, Michelangelo lay on the scaffolding, neck bent backwards and paint dripping into his eyes. This common image of Michelangelo lying on his back is actually a myth. He was far too clever an engineer to torture himself that way. Instead, he designed scaffolding that allowed him to stand rather than paint lying down. But standing was no less punishing - his head bent back for hours, paint dripping into his eyes, arms aching from holding the brush overhead. He had no assistants for most of the work, choosing to do it himself.

For **four long years,** on a curved surface high above the ground, he depicted nine scenes from The Book of Genesis: The Story of Creation, The Fall, and God's covenant with humanity. More than 300 figures fill the space, including the iconic *Creation of Adam*, where God's hand reaches toward man's. You can imagine his hands numb, his neck aching, and his spirit tested. Today the world does not see a weary man's struggle or aches - it sees eternity captured in paint and faith made visible.

Decades later, in 1536, Pope Paul III called Michelangelo back to paint *The Last Judgment* on the altar wall. But just as the masterpiece neared completion, along came Cardinal Biagio da Cesena. He complained, *"These images are more fit for a tavern than a chapel."*

Michelangelo didn't argue. He rarely defended himself in words - he let his brush do the talking. He painted Biagio's face onto Minos, Judge of the Underworld, with donkey ears and a snake biting him. When Biagio protested to Pope Paul III, the Pope famously said: *"If he had put you in Purgatory, I could have helped. But over Hell, I have no power!"*

The lesson is serious: when someone is doing the work of God, don't be the stumbling block. Jesus rebuked Peter in Matthew 16:23: "You do not have in mind the concerns of God, but merely human concerns."

Lesson Learnt: *when you stand with the builders of good, you share in their legacy. But when you stand against them, you may find yourself - like poor Biagio - immortalised in a very unflattering way.*

Act 2: Antoni Gaudí

A cathedral is not only a statement of God's greatness. It is a mirror of who we are called to be.

Barcelona, late 1800s. Antoni Gaudí is already famous for turning buildings into art. Inspired by the mountains of Montserrat, the waves of the Mediterranean, and the twisted trunks of olive trees, he builds them into stone, iron, and tile. He twists iron balconies into plant vines, makes chimneys look like warriors, and leaves every other architect feeling underdressed. From the likes of Park Güell, Casa Batlló, and Casa Milà, Gaudí made the city of Barcelona his canvas.

Then comes a call. The Devotees of St. Joseph were building a great church dedicated to the Holy Family - the Sagrada Família - emphasising the sanctity of family life. Here Joseph, unlike normal Catholic tradition, is venerated as an equal pillar in the holy triad of family life. He is shown as protector, worker, father - a nod to fathers worldwide.

What began as a commission became a consecration of Gaudi's genius. Gaudí is inspired, and the project becomes his life's mission. For over 40 years, he devotes himself to La Sagrada Família. In his final 15 years, he lives on-site, sleeping in a workshop, giving every waking moment to God's Basilica.

Gaudí knew he would not live to see it finished. So, he worked a sample of his vision in the Nativity Façade - constructing hyperboloids, parabolas, and helicoids into the building. It is a masterclass of geometry and architecture to create beauty and strength. For Gaudí, faith and science were not opposites - both pointed to God's order. When he died tragically in 1926, only the Nativity Façade stood completed, as a guide for future architects to complete his grand vision.

Sagrada Familia

Most churches put their decorations on the inside. But Gaudí did the opposite - he carved the outside with an explosion of Gospel scenes. The Nativity, the Passion, the Glory façades together tell the whole story of salvation - a Gospel carved in stone. Gaudí believed that even the passerby could encounter Christ. Even those who never stepped in could hear the message. He wanted to invite people in.

And when you finally do step inside? It feels simple, hushed, almost plain. Why? Because Gaudí believed the church should not only be a place to marvel, but a place to listen, reflect, and encounter God's love personally. The light breaks in - stained glass scattering colour - as if heaven itself has leaked into the walls.

Gaudí once said, "The straight line belongs to men, the curved line belongs to God." Nature is God's original blueprint. And Gaudí built his cathedral with curves that look so alive, honouring divine creativity and freedom. Even today, over 140 years later, the work continues. It is scheduled for completion in 2026, the 100th anniversary of Gaudí's death, though it remains a hopeful milestone.

Lesson learnt: *Live your life so beautifully on the outside that it draws people closer to see what's inside.*

Act 3: Christopher Wren
The Man with the Hidden Dome

It is 1666. London burns. The Great Fire turns 13,200 houses into ash and dreams into smoke. Sir Christopher Wren - mathematician, astronomer, architect - must have watched his city vanish into flame. And with it, the old St. Paul's Cathedral, the largest church in England at the time, was completely consumed.

When the fire died, London needed more than bricks. It needed hope for the tens of thousands homeless. And at the heart of that hope was the church. In 1669, Sir Christopher Wren was commissioned to rebuild much of the city, including the new St. Paul's Cathedral.

Everyone assumed he would erect a soaring spire, restoring the traditional spiritual beacon.

But this was the age of Enlightenment. New ideas were challenging old certainties, and the universe itself was being re-imagined. A few decades earlier, Galileo had lifted his telescope to the skies, glimpsed the moons of Jupiter, traced the rings of Saturn, and shown the world that creation - the planets, moons, and stars - did not wander aimlessly. They moved in perfect circles and each one appears round, complete, whole.

Wren did not want to build a church; he wanted to translate that vision of order into stone. He saw the dome as a symbol of the heavens. Structurally, it could be stronger, grander, and inspire awe for centuries. Yet the church authorities resisted - too radical, too unfamiliar, they said.

St. Paul's Cathedral

So, Wren agreed to build their spire. In 1675 he submitted his 'warrant design', showing a more spire-like profile. But once construction began, he made subtle 'adjustments for stability' - step by step, year by year - shaping it into a dome. By the time the outer shell took form, reversing it was impossible. Some called it Wren's 'masterful deception.' Historians prefer the phrase: tactical persistence.

Inside, he designed three domes in one:

- The inner dome is visible to worshippers, soaring to 365 feet from the floor - a calendar year written in stone, a reminder that the God who orders the stars also orders our days. The dome is a perfect hemisphere, so mathematically precise that you could whisper at one end and be heard (34m) across the other.
- The structural dome hidden between, carries the weight.

- The outer dome, has become a silhouette of London's skyline

Wren began this work in his forties. He was nearly 80 when, in 1710, St. Paul's Cathedral was declared complete. It stood not just as a church, but as a symbol of faith aligned with science, and of London's resilience rising from the ashes.

Lesson: *Wren's greatest legacy: Faith and reason need not oppose one another - they can lift each other higher, just as his dome still lifts the eye, and the heart, to the heavens.*

*Years later, Charles Wesley would pen the hymn "**Love Divine, All Loves Excelling**", and within it a tender plea: **"Let us not thy temples leave."** Was that line born from pure Scripture? Perhaps, but the awe of standing beneath Wren's great dome could have planted a spark. A spark that became a hymn. A hymn that became a devotion. A devotion that fuelled a movement: the Methodist revival.*

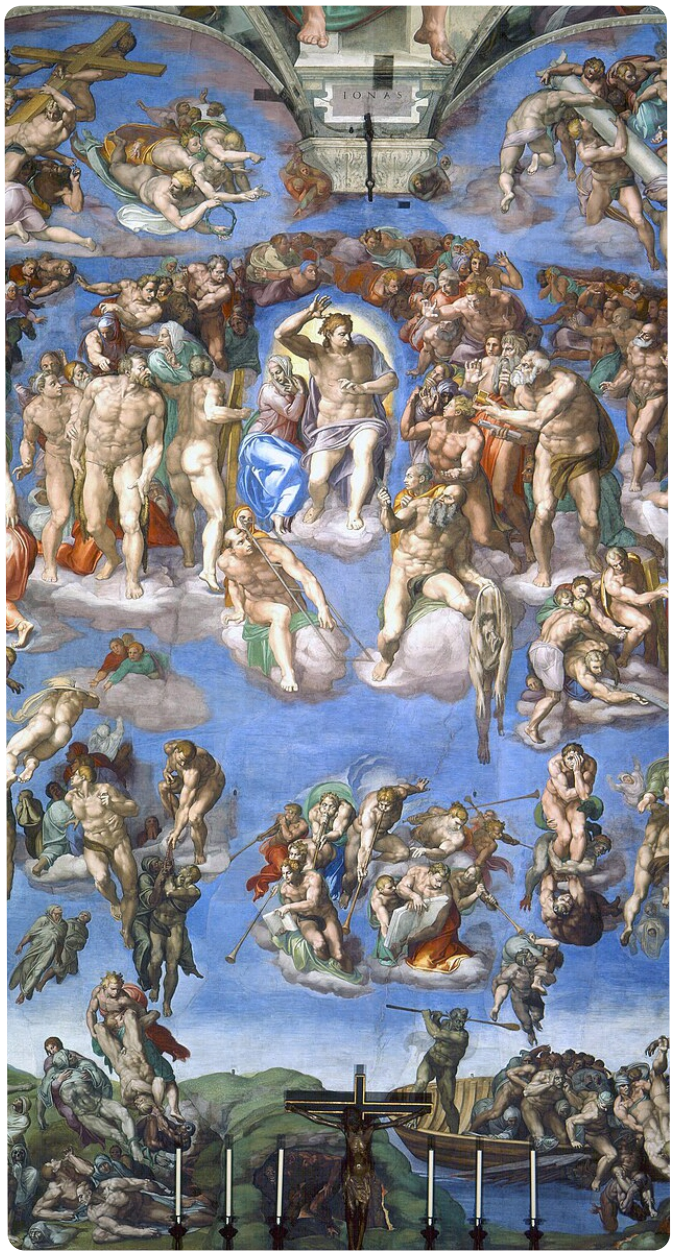
And now, in our time, we too have raised something lasting - the St George's Cathedral, restored to its original splendour.

Let us pause in gratitude…

to the craftsmen who shaped stone,
to the planners who gave vision,
to the donors who gave generously,
to the volunteers who offered time,
and to the congregation who upheld this work in prayer -
we say thank you.

Generations yet to come will walk through these doors, look up at these walls, and be inspired - not only by the beauty of the work, but by the faith that made it possible.

This is our legacy, that in our day we laboured, in their day they will worship, and together, across the ages, our praise will rise to the same Lord, Jesus Christ.



> "Michelangelo with his ceiling, Gaudí with his basilica, Wren with his dome - each left behind monuments truly fit for the King of Kings."

Presbyter Rev Dr A Ruben Jayakumar

Closing Thoughts

When the morning sun strikes the spire of St. George's Cathedral, the white stone still catches the light much as it did in 1816, when this house of God was first consecrated. Yet in recent years, that light was filtered through cracks in the plaster, weather-stained walls, and fading stained glass. One could see timber beams weakened by monsoon damp, inscriptions on memorial tablets dulled by dust, and the grand east window of the Risen Christ muted where once it blazed with colour.

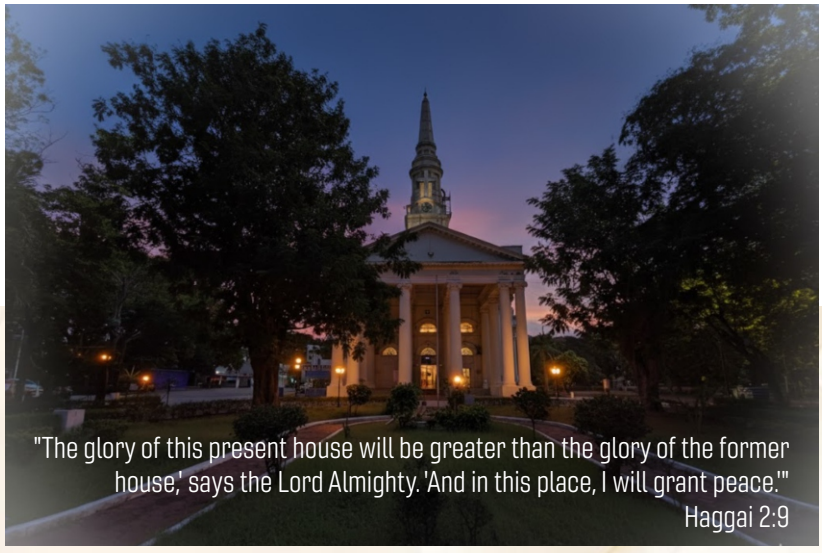
It was this realisation that stirred us to act.

With careful attention to detail, the timber of the pews was restored, the roof reinforced, and the stone flooring re-laid with respect for the original artistry. Special care was given to the pulpit, the baptismal font, and the memorial tablets that tell the stories of men and women whose lives and sacrifices are part of our shared history. The restoration of the stained-glass windows was itself a labour of love, bringing back into radiant clarity the colours and imagery that remind us of God's glory and grace.

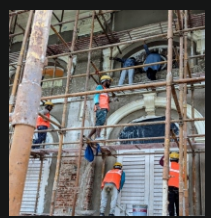
St. George's Cathedral is not only a jewel of Chennai but also a significant chapter in the story of Anglican and Christian witness in Asia. It is part of a global heritage of cathedrals that dot the skylines of Canterbury, Westminster and beyond, a reminder that the Church transcends borders, languages, and centuries. It connects us with that wider fellowship of believers across the world, even as it remains rooted in the soil of Tamil Nadu and the vibrant life of the Indian Church. The restoration, therefore, is not merely local. It is part of a global act of remembrance and renewal, preserving for the world one of the finest examples of colonial ecclesiastical architecture in Asia.

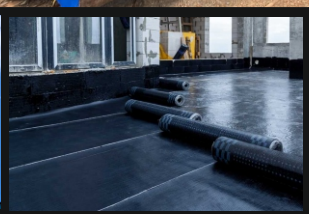
I give thanks to each member of our congregation and every friend who contributed their resources, time and prayers, for this work was never about preserving bricks and mortar alone. From within these walls, prayers have ascended for peace during wars, for justice during times of upheaval, and for healing during pandemics. The cathedral has hosted coronation services of governors, memorials for soldiers, and diverse gatherings that speak to the pluralistic spirit of our great nation.

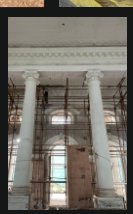
This work of restoration is not an ending, but a new beginning.

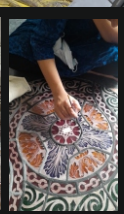


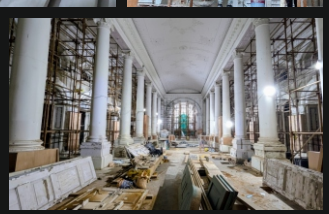
ST. GEORGE'S CATHEDRAL RESTORATION : CORE TEAM











RESTORATION WORK IN PROGRESS