



ST MICHAEL'S IN THE HAMLET - PRESENTATION
Thursday 18th June 2015



INTRODUCING FINLASON PARTNERSHIP LTD...

Specialists in Conservation and Listed Buildings

Finlason Partnership Limited (FPL) is an architectural practice offering architects services to a wide range of client types on both a local & national basis from offices in Hale, Cheshire, at the edge of Manchester. FPL is a trusted RIBA Chartered Practice and on the AABC Register of Architects Accredited in Building Conservation

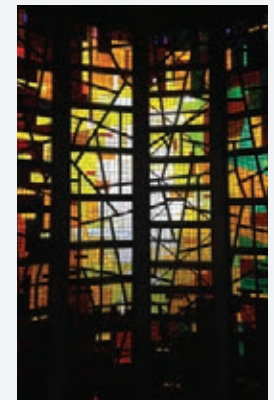
We have a wide range of experience with:

- Grade I;
- Grade II*;
- Grade II; and
- Scheduled Monuments.

Breadth of experience and skills...

- Liverpool connections – working in city for past 15 years.
- Liverpool City Council and Diocese.
- Historic England, English Heritage, HLF and others – well known to senior members.

FPL has a particular specialism in the conservation and repair of historic and listed buildings, with numerous projects live on site at any given time. FPL's AABC registration provides clients with the assurance that as skilled conservation architects our involvement protects the historic built environment from damaging interventions devised by people not skilled in historic building conservation and adaptation.



INTRODUCING FINLASON PARTNERSHIP LTD...
Specialists in Conservation and Listed Buildings



INTRODUCING FINLASON PARTNERSHIP LTD...

Our Other Work

Other sectors we are actively involved in...

- Residential
- Commercial
- Retail
- Ecclesiastical
- Education
- Sports and Leisure
- Healthcare
- Industrial

We have completed and are working on projects with a complete range of size and requirements across the North West and the UK.

Overview...

- 20-years in business,
- Six staff (incl. 1 clerical) plus consultants,
- 'Hands-on' director involvement – Alex and Martyn,
- CAD and modeling skills,
- Background wholly in multi-disciplinary design practice,
- Commonly offer 'one-stop shop' but accommodate all needs;
- Usual method of working provides an important insight.

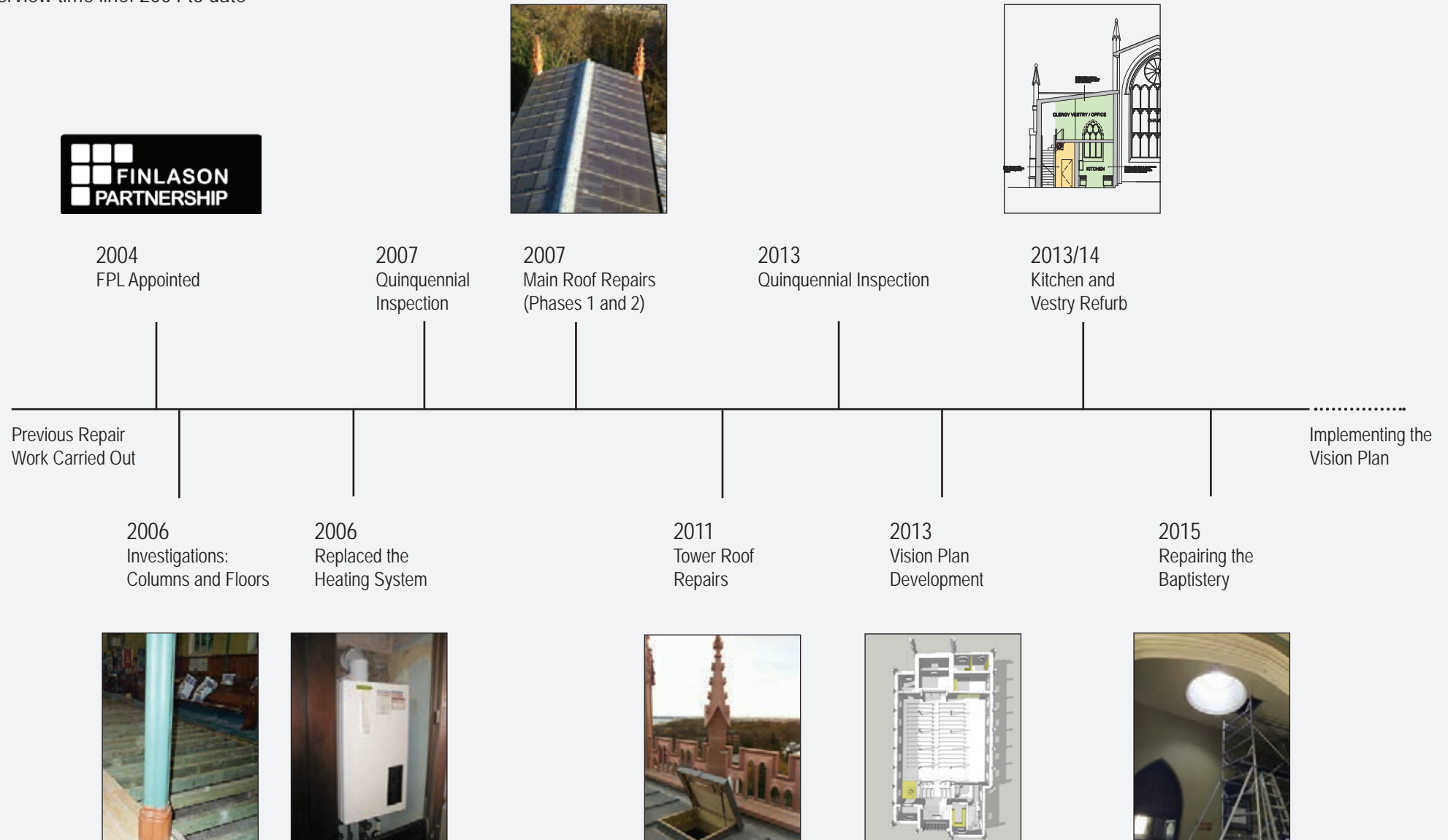
Delivering on time and within budget...

- Understanding & agreeing common objectives,
- Project management – brief taking & recording,
- Pre-planning, programming, monitoring and managing effort, resources & expectations,
- Understanding needs, tasks and outcomes,
- Including input of other professions – timely & appropriate advice;
- Cost control – the partnership approach.



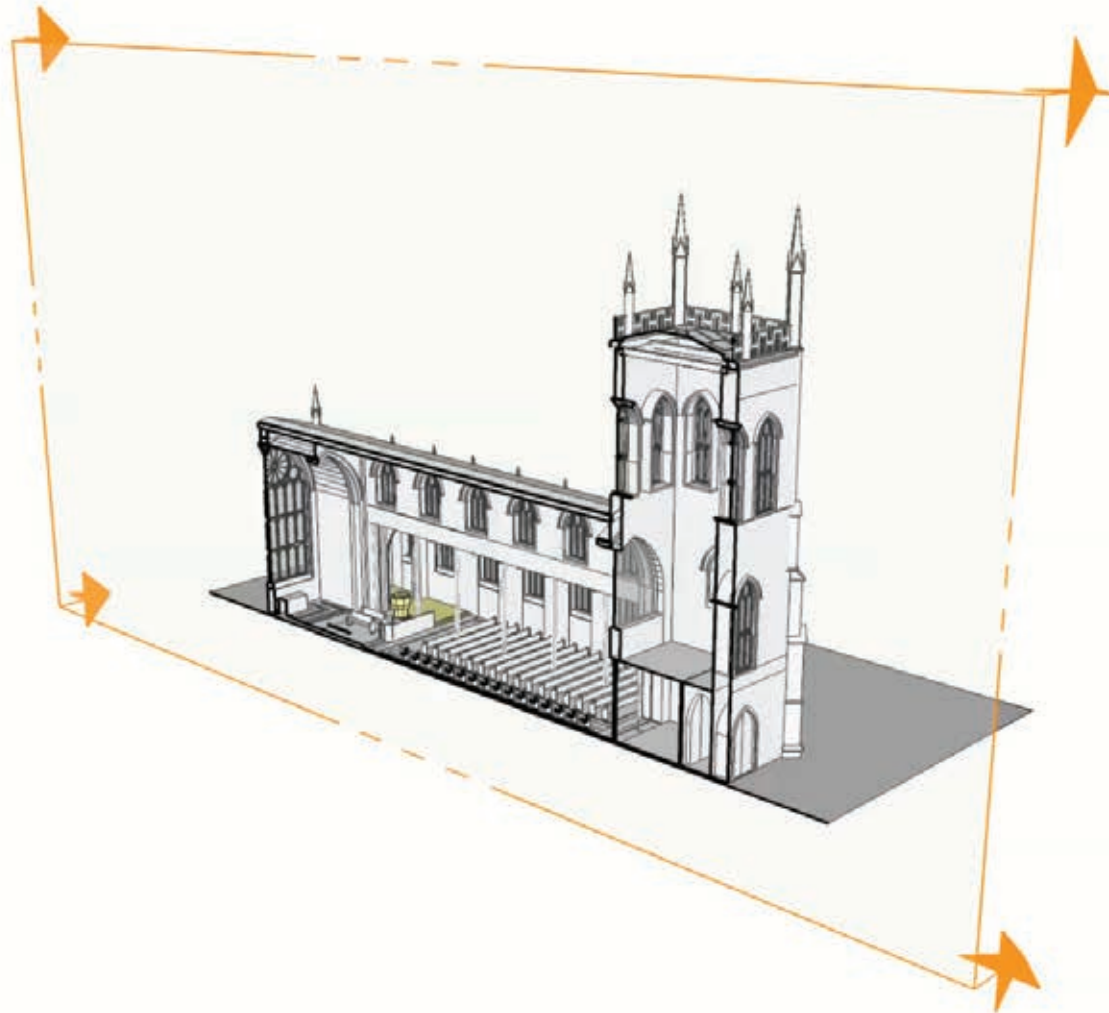
WHAT HAS BEEN ACHIEVED SO FAR...

Overview time line: 2004 to date



WHAT HAS BEEN ACHIEVED SO FAR...

Overview: FPL Modelling



WHAT HAS BEEN ACHIEVED SO FAR...

Phase 1 & 2: Main Roof Repairs - Before

Budget: £400,000

Construction: April - October 2007

Works included:

- Complete removed existing nave roof
- Re-roofed the nave roof
- New lead-work to nave roof
- Re-pointed nave brickwork
- Repairs to the cast iron clerestory windows
- Re-render entire clerestory
- Repair of cast ironwork
- New gutters, rainwater pipes and associated details to nave
- General repainting and decoration of nave and clerestory



WHAT HAS BEEN ACHIEVED SO FAR...

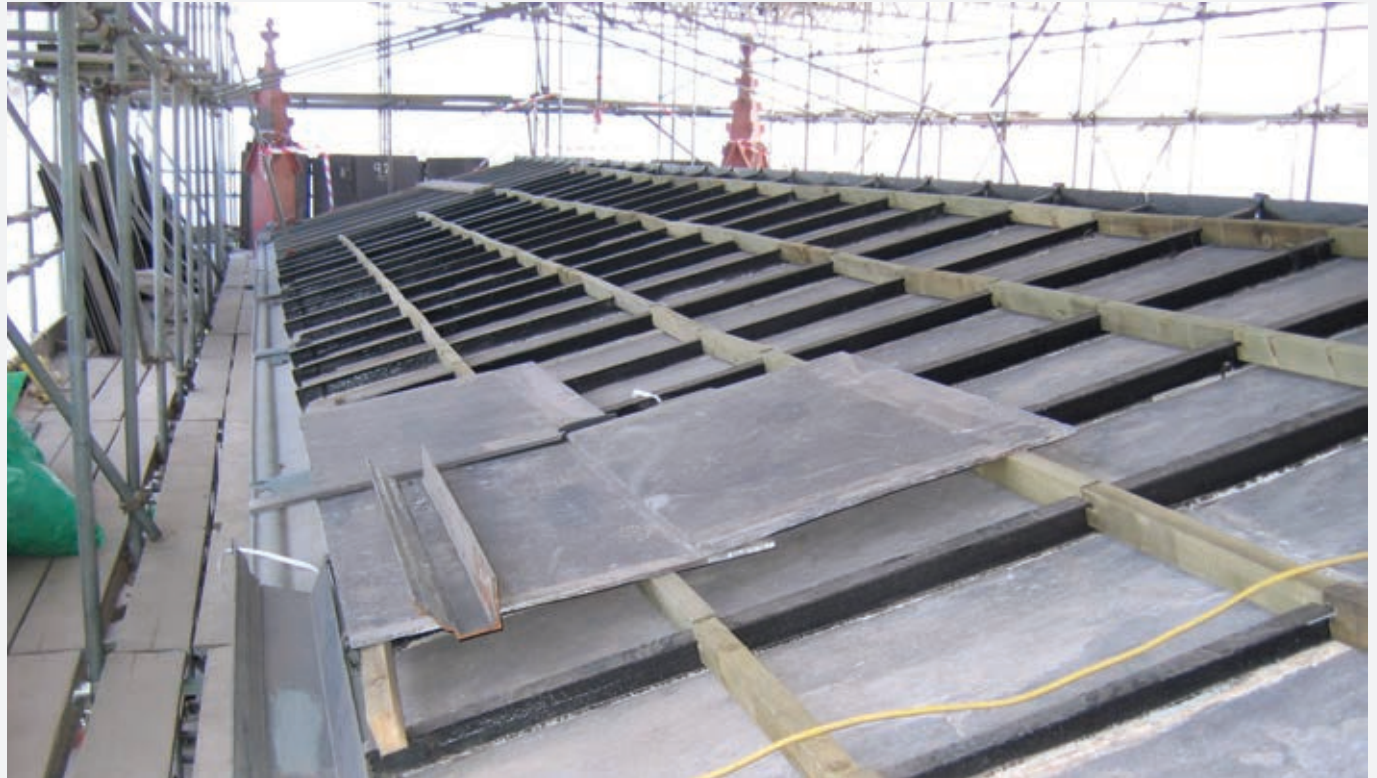
Phase 2: Main Roof Repairs - During

Budget: £400,000

Construction: April - October 2007

Works included:

- Complete removed existing nave roof
- Re-roofed the nave roof
- New lead work to nave roof
- Re-pointed nave brickwork
- Repairs to the cast iron clerestory windows
- Re-render entire clerestory
- Repair of cast ironwork
- New gutters, rainwater pipes and associated details to nave
- General repainting and decoration of nave and clerestory



WHAT HAS BEEN ACHIEVED SO FAR...

Phase 2: Main Roof Repairs - After

Budget: £400,000

Construction: April - October 2007

Works included:

- Complete removed existing nave roof
- Re-roofed the nave roof
- New lead work to nave roof
- Re-pointed nave brickwork
- Repairs to the cast iron clerestory windows
- Re-render entire clerestory
- Repair of cast ironwork
- New gutters, rainwater pipes and associated details to nave
- General repainting and decoration of nave and clerestory



WHAT HAS BEEN ACHIEVED SO FAR...

Phase 3: Tower Repairs - Before

Budget: £250,000

Construction: February - July 2011

Works included:

- Dismantle, repair, reconstruction and re-erection of eight pinnacles and frames
- Removal of existing stainless steel roof
- New stainless steel support structure
- Construction of a new shallow pyramidal lead roof
- Perimeter lead box gutter with four outlets
- New access hatches



WHAT HAS BEEN ACHIEVED SO FAR...

Phase 3: Tower Repairs - During

Budget: £250,000

Construction: February - July 2011

Works included:

- Dismantle, repair, reconstruction and re-erection of eight pinnacles and frames
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WHAT HAS BEEN ACHIEVED SO FAR...

Phase 3: Tower Repairs - Design



WHAT HAS BEEN ACHIEVED SO FAR...

Phase 3: Tower Repairs - After

Budget: £250,000

Construction: February - July 2011

Works included:

- Dismantle, repair, reconstruction and re-erection of eight pinnacles and frames
- Removal of existing stainless steel roof
- New stainless steel support structure
- Construction of a new shallow pyramidal lead roof
- Perimeter lead box gutter with four outlets
- New access hatches



WHAT IS UNDERWAY...

Phase 4: Baptistery Repairs

Budget: £85,000

Construction: TBC

Works included:

- Strip stainless steel roofing and 2 roof lights in effected area
- Renew all lead flashings at abutments and parapet gutters
- Masonry pointing at tower abutment
- New roof light coverings
- Work to 3 No Aisle parapets – iron work and stone pinnacles
- Structural repairs to exposed roof – timber members and connections to the iron frame
- Repair work to circular roof lights internally and re-plastering
- New stainless steel roofing

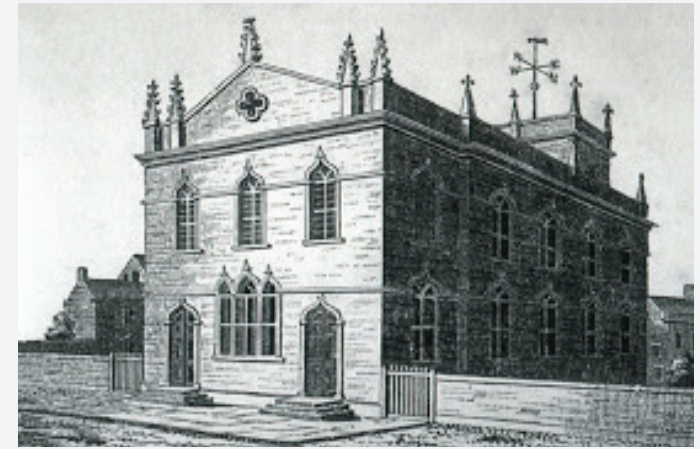
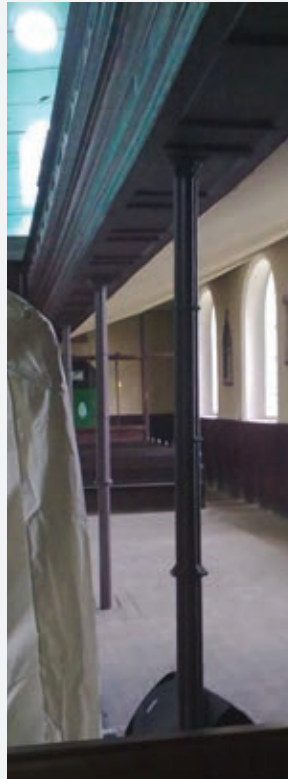


ST MICHAEL'S HISTORIC IMPORTANCE...

Context of Liverpool's Iron Churches

Liverpool is the birthplace of the use of cast iron in churches.

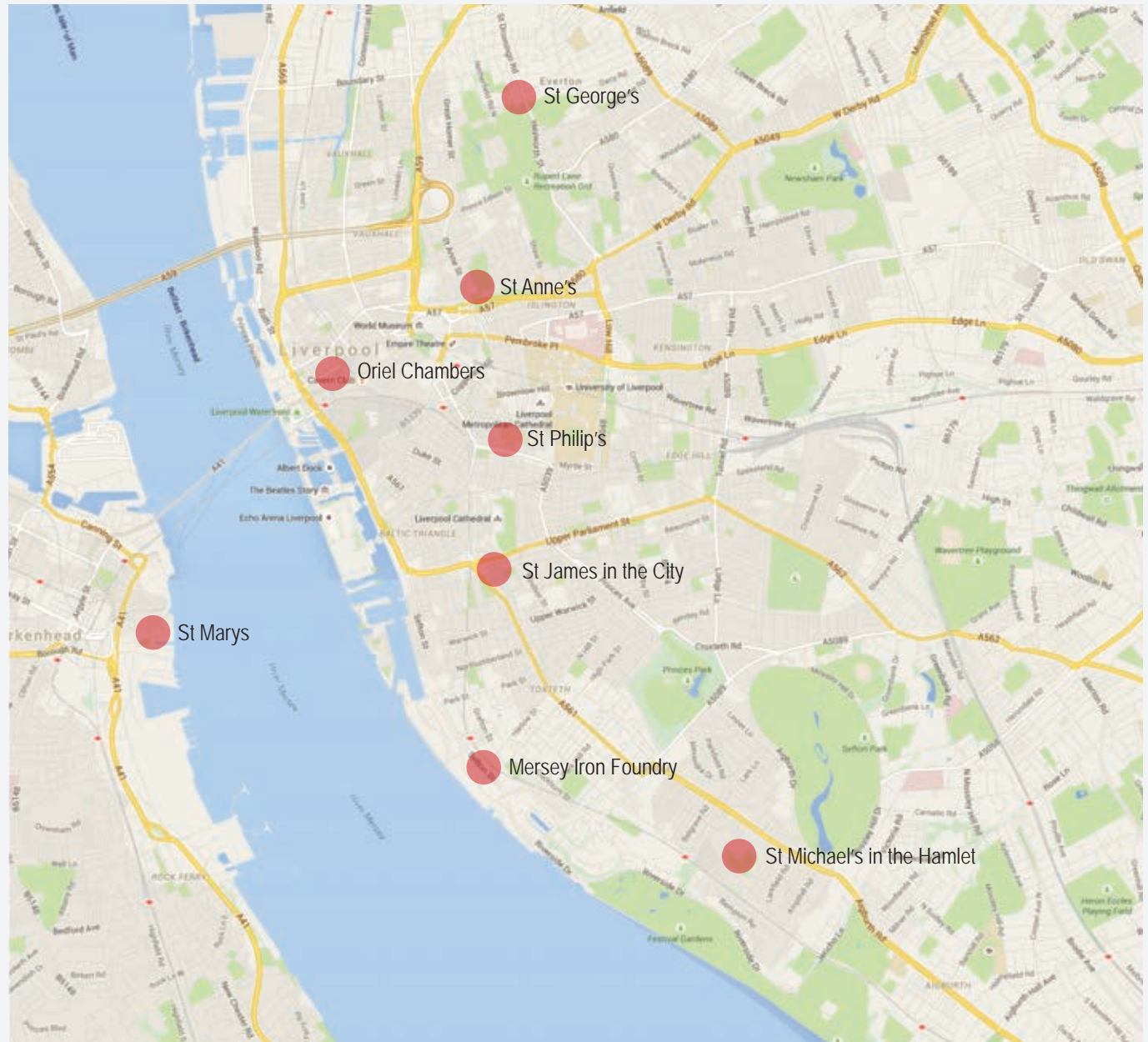
1752	Monastery, Alcobaca, Portugal First structural use of cast iron
1765	St Petersburg (recorded by Casanova) House using iron from foundations to roof
1772	St Anne's Church, Liverpool First use of cast iron for minor structural columns
1775	St James', Toxeth Park, Liverpool Iron columns used for supporting the galleries
1779	Iron Bridge, Coalbrookdale First bridge constructed with cast iron
1795	St Alkmund, Shrewsbury First use of cast iron tracery
1814	St George's Church, Everton, Liverpool Unprecedented use of cast iron structurally and decoratively
1815	St Michael's in the Hamlet, Aigburth, Liverpool Unprecedented use of cast iron for external walls, including patented iron slate cladding technique
1834	The Church Commission approved the use of cast iron in churches, 20 years after St Georges was completed



ST MICHAEL'S HISTORIC IMPORTANCE...

Context of Liverpool's Iron Churches

-
- 1772 - St Anne's – Demolished (no sign of previous church)
 - 1775 - St James' – Second building to have iron structural columns after St Anne's
 - 1814 - St George's – Cragg and Rickman first 'Iron Church'
 - 1815 - St Michael in the Hamlet – Cragg and Rickman second 'Iron Church'
 - 1816 - St Philip's – Demolished (Plaque exists remembering Cragg and Rickman) third and final 'Iron Church'
 - 1817 - St Marys – Demolished (still part of the outer wall remaining)
- Other important buildings/locations:
- 1864 - Oriel Chambers - Worlds first metal frame glass curtain wall
 - St Michael's in the Hamlet – Five villas Cragg built, all are Grade II Listed
 - Mersey Iron Foundry – John Cragg's Iron Foundry
-



ST MICHAEL'S HISTORIC IMPORTANCE...

Cragg's and Rickman

John Cragg was the proprietor of the Mersey Iron Foundry, which manufactured iron structures which were at the leading edge of technology and took a while to become accepted. Cragg aspired to exploit and use iron much more extensively and push it to its limits. Cragg's was devoted to church and he saw the growth of population and the need for more churches to be the ideal area for his cast iron.

As early as 1809 Cragg was looking for opportunities to incorporate prefabricated ironwork into the structure of buildings. Originally worked with architect Joseph Gandy for a church where he had bought land which would become St Michael's in the Hamlet. Before this Cragg had an opportunity in Everton and employed Thomas Rickman to design St Georges Church. The design incorporated an unprecedented use of iron structurally and decoratively...using a cast iron frame with cast iron window frames and tracery and a complete iron interior.

Using some of the same moulds Cragg and Rickman completed their second church, St Michael's in the Hamlet between 1813 - 1815. Cast iron was used even more extensively for walls, parapets, battlements, pinnacles, hood moulds and other details. The iron plinth used for the foundation allowed buildings to be constructed on difficult terrain.

The last Iron Church by Cragg and Rickman was St Philip's, Hardman Street, Liverpool, closed in 1882.

Rickman's other Liverpool churches include St Marys, Birkenhead, 1817, which the V & A house some of the iron tracery.



ST MICHAEL'S HISTORIC IMPORTANCE...

The 'Iron and Slate Church'

St Michael's in the Hamlet was constructed between 1813 - 1815. Cast iron was used even more extensively for walls, parapets, battlements, pinnacles, hood moulds and other details. The iron plinth used for the foundation allowed buildings to be constructed on difficult terrain.

Cast iron use:

- Foundation Plinth
- Walls
- Parapets
- Battlements
- Pinnacles
- Hood Moulds
- Tracery
- Clerestory Cladding
- Window and Door Surrounds
- Columns
- Arches
- Church Fence

One of the first examples of prefabricated and modular architecture which was designed to easily accommodate extensions, exemplified in 1897 when the north aisle was 'seamlessly doubled in width' (Pevsner).

Described by English Heritage as one of the earliest and most thorough uses of industrial materials in a major building it used modular sizes of slates to span the cast iron roof trusses forming the ceiling soffits and roof covering.



ST MICHAEL'S HISTORIC IMPORTANCE...

Significance

St Michael's has been known as the Iron Church, however it would be more fitting for it to be known as the Iron and Slate Church as it was not only an influential and important piece of architecture due to its use of cast iron alone, but had patented slate technology which has influenced the development of slate roofs.

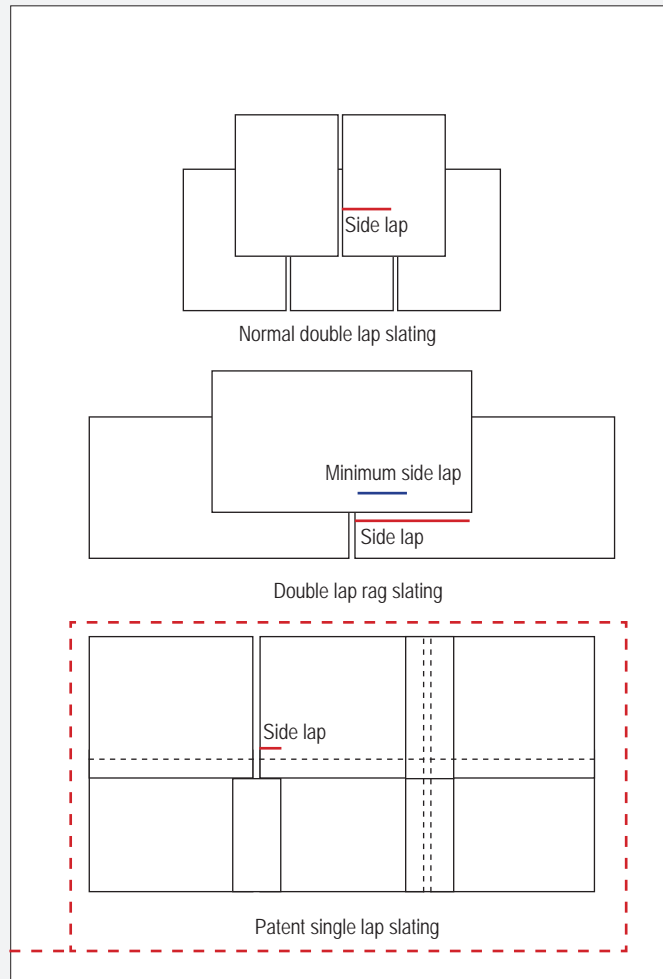
November 21st 1809

Specification of the Patent granted to John Cragg of Liverpool, in the County Palatine of Lancaster; for certain improvements in the casting of iron roofs for houses, warehouses, and other buildings, and in covering the same with slates.

November 29th 1813

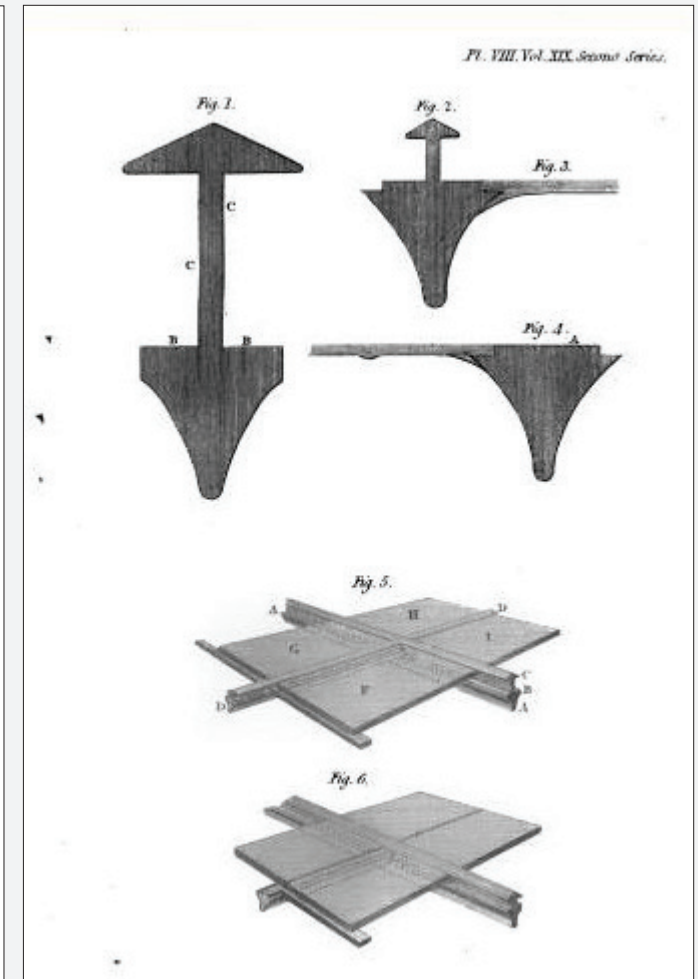
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St Michael's in the Hamlet Slating



Rawlinson Patent Slating (1772):

Reduced quantity of slate by 50% by laying the slates single lapped and simply butting up the sides, the perpendicular joints are left open but leaks are prevented by bedding slate strips in a 'mastic' or glaziers putty



Cragg Patent Slating (1909):

Invented the cast iron slating roof structure below the slate roof and the way the slates were attached to the iron through rivets or pegs

ST MICHAEL'S HISTORIC IMPORTANCE...

Case Study: Our work at St George's, Everton

St Michael's and St Georges have extremely similar technology as both were projects by Cragg's and Rickman. Many of the cast iron moulds were used on both churches. St Michael's having been designed first (although constructed second) was used as the basis for the design of St Georges.

FPL have just completed Phase 1: Urgent Roof Repairs at St George's Church, which has very similar patent slate roofing.

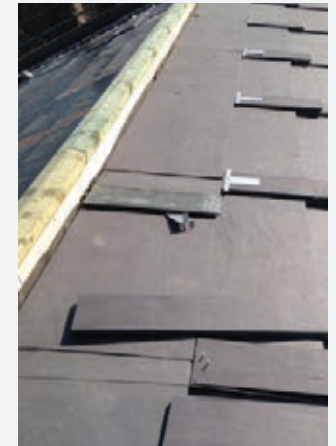


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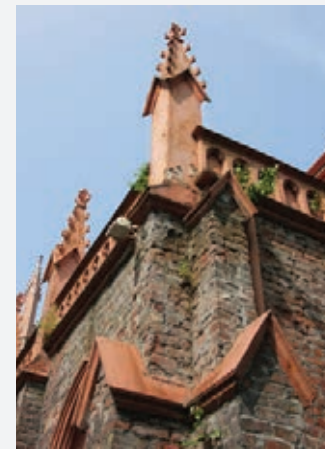
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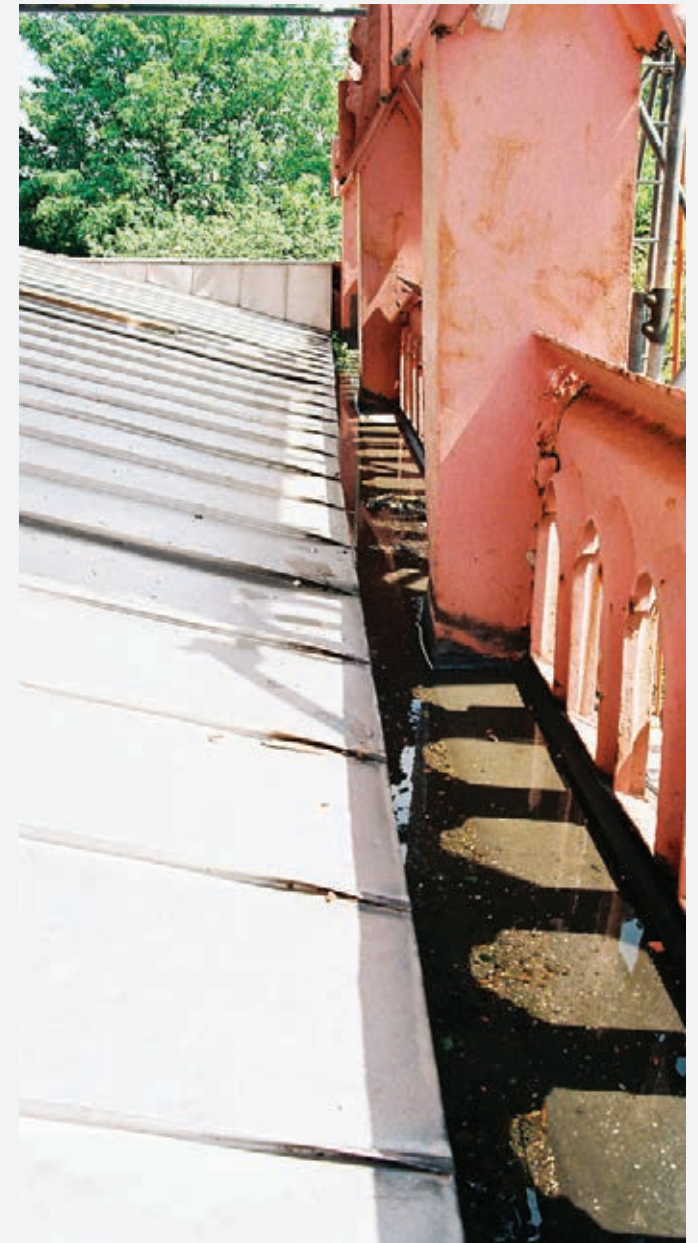
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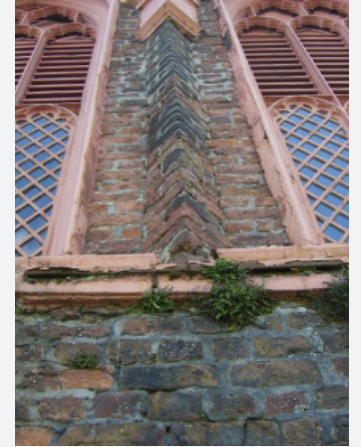
WHAT DO WE DO WITH ST MICHAEL'S?
There is plenty of work still to be done...



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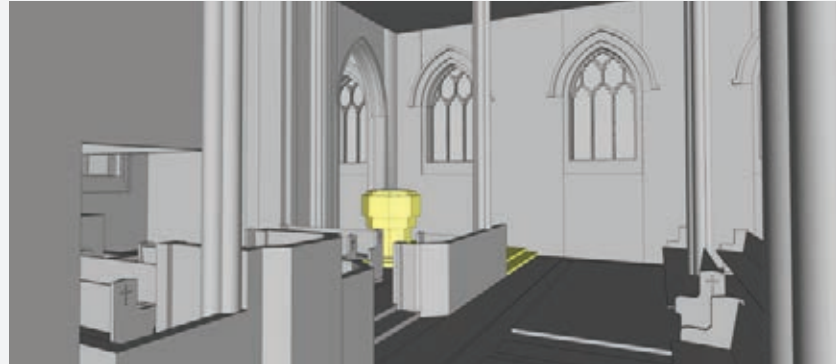
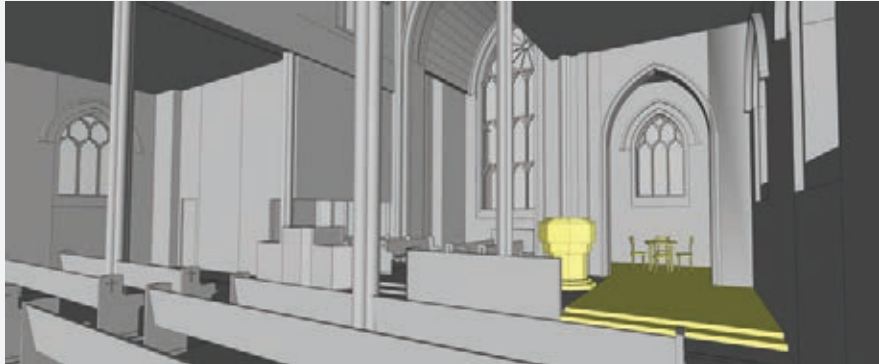
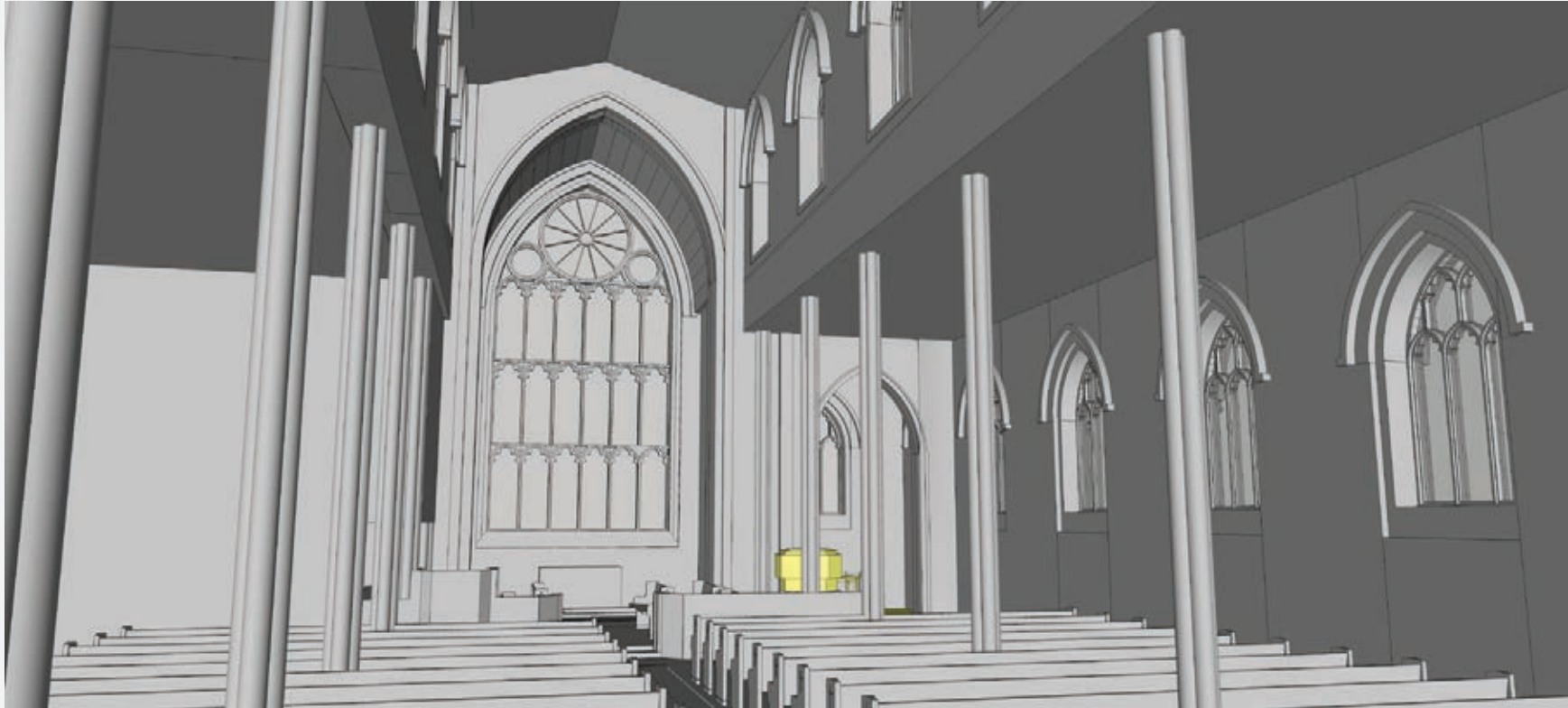
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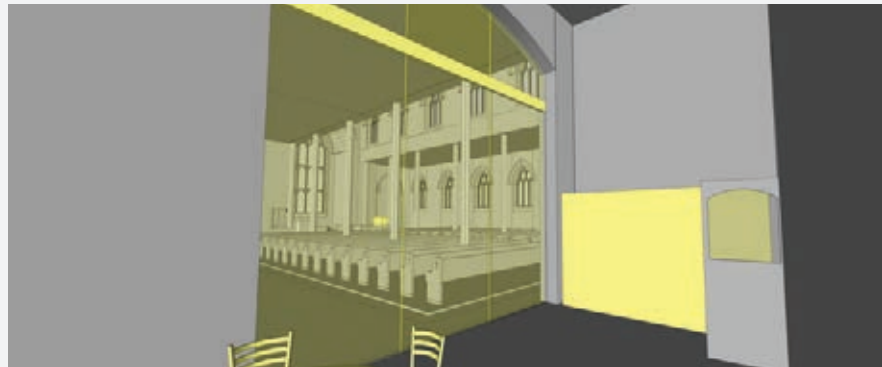
MAKING ST MICHAEL'S FIT FOR TOMORROW ...
Vision Plan: Strategy Overview



MAKING ST MICHAEL'S FIT FOR TOMORROW ...
Vision Plan: Relocating the Font



MAKING ST MICHAEL'S FIT FOR TOMORROW ...
Vision Plan: Proposed Crèche/Flexible Space



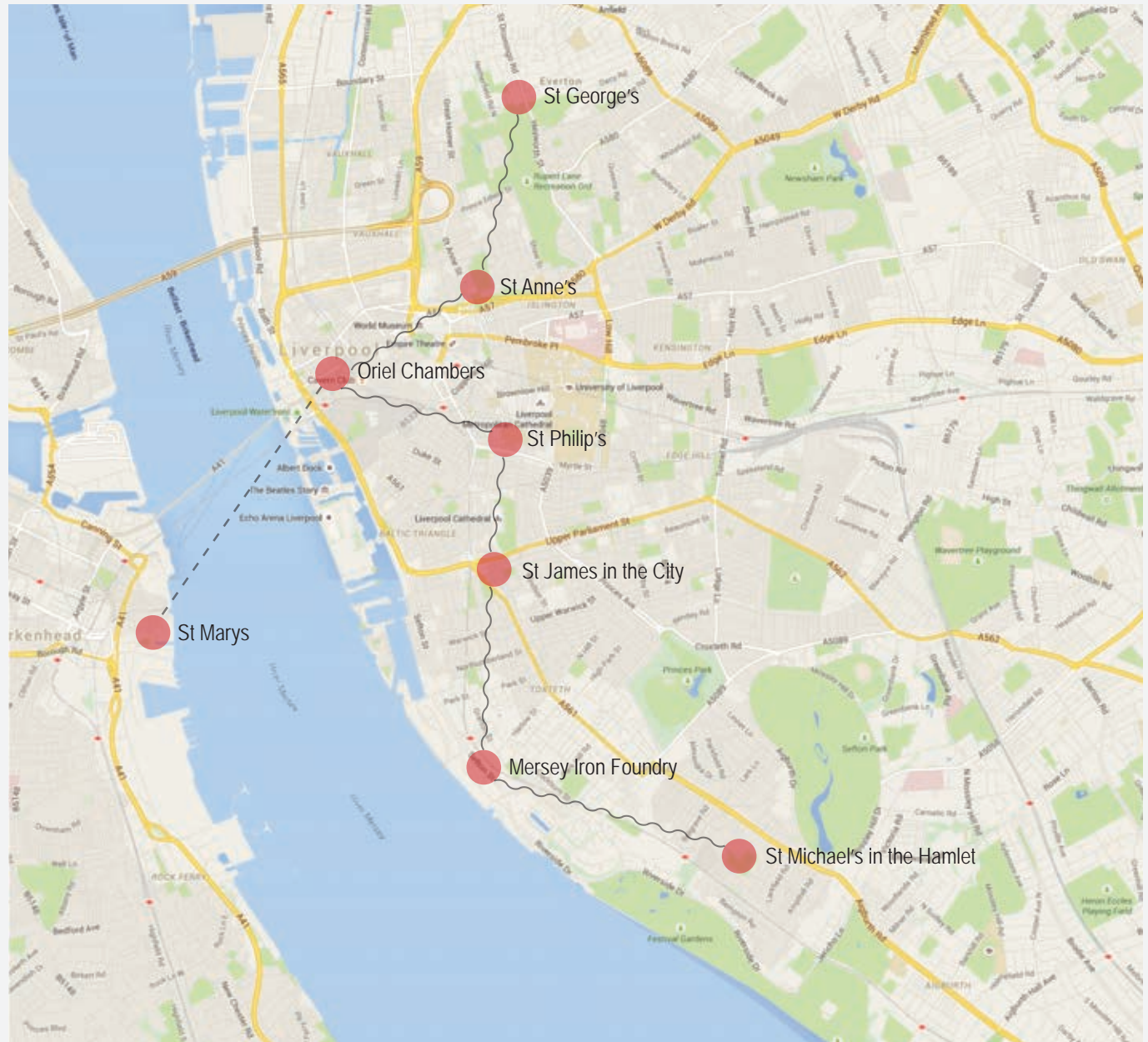
THE IRON TRAIL...

Linking the Iron Churches

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