

**BELLMONT**  
FACADE ENGINEERING

**ARA** BUILDING SERVICES

# Saint Sophia Cathedral

National Trust (NSW) Heritage Awards Submission

2024

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## Award Category

Built Conservation: For projects that relate to conservation of our built heritage including capital works and repair. Such projects may include buildings, structures or sites.



## Partners on this project

- Owner, Greek Orthodox Community of New South Wales
- BellMont Facade engineering:
  - Heritage consultant
  - Structural consultant
  - Facade consultant
- ARA Building Services

# BellMont Facade Engineering

In 2001 BellMont Facade Engineering first opened its doors, seeking to provide a point of difference in what was effectively, a homogeneous marketplace.

With extensive experience across structural and facade engineering, we pride ourselves on offering a point of difference to the building industry, inclusive of:

- Market leading structural and specialist engineering solutions
- Structural materials and solutions services
- Waterproofing analysis, solutions design and testing
- Consulting to prominent strata managed buildings
- Technical and consulting services
- Building reports and expert services

With the capacity to provide our services up the East Coast of Australia, we work with builders, body corporate, strata managers and construction firms.

Bill Moisidis, Director of BellMont Facade Engineering, has worked closely with Heritage Architects providing design and rectification advice on many Heritage listed buildings. Bill is a licensed builder, structural and facade engineer and project manager. Bill's intricate knowledge of construction materials in both modern and heritage structures allows for early assessment and diagnosis of building problems and the preparation of efficient conservation and rectification scopes to be prepared.

*BellMont Facade Engineering*  
www.bellmont.net

“My mother served as a choir member at Agia Sophia for an extended period upon her arrival from Epirus. During this period, the Greek community in the vicinity was thriving.”

Bill Moisidis - Director

## Meet our team



Bill Moisidis | Director



Gregory Harellis | Engineer



Rodi Bircan | Engineer



Katelyn Furniss | Marketing Coordinator

# ARA Building Services

Through reputation in business, focus on performance and years of unsurpassable experience, ARA Building continues to consolidate its position as one of the leaders in the building remediation industry. Conscious of the need for effective service in the remedial industry, ARA Building's aim is to provide clients with professional process, personal attention and long term solutions.

By working in close liaison with consultants and reputable suppliers our mission statement is "our business success is directly dependant on our client satisfaction". Our objective is to establish our business as "the best" rather than "the biggest" in the industry and this is reflected in the continual repeat business and the excellence in project delivery. ARA Building REMEDIAL & RESTORATION PAGE 4 Structural Repair Concert.

As an insurance building repairs specialist, ARA Building has been serving the insurance industry for over 40 years. Our team of licensed, qualified tradespeople have the experience and training necessary to carry out complex rectifications to commercial, strata and domestic properties for insurance claims and disaster relief. Our expertise spans the construction industry spectrum, from smaller renovations to multi-million dollar projects. Offering a comprehensive range of trades to carry out all building repairs through safe work practices and pride of workmanship, we deliver one of the most comprehensive, reliable and professional insurance building repair services in Australia

Proudly Australian owned and operated, ARA Building has grown to be a national contractor with a diversified construction portfolio. We've built our reputation on "client satisfaction" focused on the service we deliver to our clients. The partnerships and relationships that have been formed over the years have lead to the continuous growth and repeat client business. "Our business success is directly dependent on our client satisfaction" With an experienced construction team and in-house network of services, the strength of our business is our people. We employ the best in the industry and strive to better ourselves every day.

## Managing director - Tony Murr

Tony Murr is the highly skilled Managing Director of ARA Building Services and has more than 30 years' experience in the building and construction industry. With 20 years in senior management roles at ARA Building Services,

Tony has extensive experience in leading his team and an exceptional knowledge base to create innovative solutions for clients and grow all aspects of the business. Tony progressed his trade career from the ground up as a building apprentice through to onsite management before moving into senior management roles.

During his trade career, Tony worked on many major developments including new wet concrete construction and large high-rises before specialising in remedial construction. Tony lives and breathes building and construction and continues to enhance his education and knowledge to remain up to date with best practice allowing him to best support his team.

## Meet our team



Tony Murr | Managing Director



Dusko Dragicevic | Project Manager

**Our team has worked closely with Bill Moisidis of BellMont Facade Engineering over five heritage restoration projects.**

**We have now developed a core team of specialist heritage tradesmen who share our passion.**

Tony Murr - *Managing Director*

**ARA Building Services**

[www.buildingservices.aragroup.com.au](http://www.buildingservices.aragroup.com.au)



# Ardex Australia

Ardex Australia are one of Australia's leading suppliers of construction materials for façade coating, waterproofing, structural repairs and resins. Ardex material product specifications were prepared and specified by Bellmont for structural and waterproofing requirements.

Ardex supplied flowable and hand placed concrete repair mortars, sheet and façade membranes, joint sealants and epoxy resins for dowelling and crack repair.

## Ardex products used on this project

- Ardex 1000 sheet membrane to waterproof the ledges and corbels
- Ardex 330 façade membrane coating to paint the façade
- BR 460 Micro concrete for concrete repairs
- Ardex BR 340 for hand placed concrete repairs
- RA 56 epoxy resin for crack repair
- Ardex concrete Crack Lock for stitching cracks





# The brief history of Saint Sophia Cathedral

The site where Saint Sophia Cathedral now stands was originally part of the Sydney Common, between the present site of Centennial Park and Oxford Street. It passed through several periods of ownership including the Wesleyan Association (1866-1908) and the Jewish Society (1914-1923). The Greek Orthodox Community NSW (established 1898) has been and continues to be responsible for the management and maintenance of the Saint Sophia Cathedral, as well as the Holy Trinity Church, the first Greek Orthodox Church in Australia (consecrated 1898), located in Bourke Street, Surry Hills and the Assumption of the Virgin Mary Church (consecrated 1956), located in Abercrombie Street, Redfern (Greek Orthodox Church in Australia, 2016, 2).

The Cathedral was purpose built and named after the Byzantine Saint Sophia or Holy Wisdom Church in Constantinople. The Greek Orthodox Community NSW, established in 1898, presided at the consecration of Saint Sophia Cathedral in 1928 (Greek Orthodox Community NSW, 2016, 3).

The great schism of Greek Orthodoxy in NSW continued for many years despite significant efforts to reconcile the opposing factions. After a prolonged period of co-existence, however, the two churches were finally reconciled into the one Community, the Greek Orthodox Community of Sydney and NSW, in April 1945.

In 2015 an Application was made to list the Cathedral as a heritage building by the State of NSW Government and this was approved. On Sunday 19 June 2016, the day of the commemoration of Saint Sophia, the NSW State Minister of Heritage, and the Honourable Mark Speakman presented the Heritage Award to Harry Danalis, President of the Greek Orthodox Community NSW (Greek Orthodox Community NSW, 2016, 2).

In 2008 The City of Sydney and Woollahra Councils officially named the crossroads of Oxford Street, Dowling Street & Darlinghurst Road, Three Saints Square recognizing the Saint Sophia Cathedral, Saint Vincent Hospital and Notre Dame University (ibid, 2016, 2).





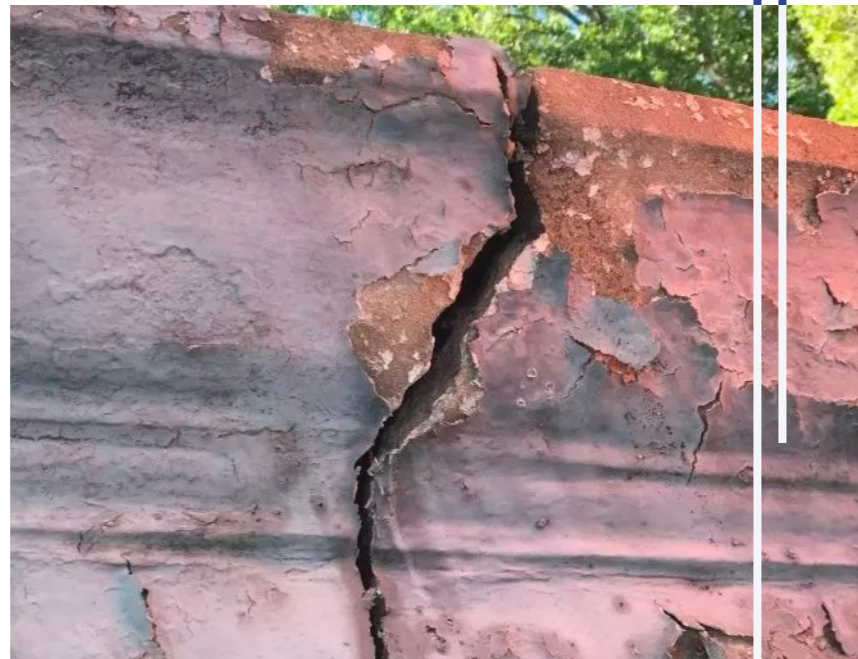
A summary of the works undertaken

## Specifications outlining repairs undertaken

- Facade Structural Cracking Repairs
- Structural Repairs
- Column Repairs
- Bell Structure Repairs
- Ceiling Repairs
- Portico Slab and Rectification

# Facade Structural Cracking Repairs

The front facade had suffered with large sections of the concrete mix completely saturated, resulting in corrosion of the steel reinforcement. The left and right corners of the upper-level frieze had shifted by up to 20mm and the bedding of the top moulds/corbel had delaminated.



## Structural Repairs

The elevated wall and entablature were repaired. A propping system was designed to support the entablature, which is 8 metres above the main entrance portico.





## Column Repairs

Concrete & Render Repairs - were undertaken to specified areas of concrete and render delamination, typically located in corbels, ledges, slab edges, soffits and the rooftop parapet, on all elevations of the building and other reinforced concrete surfaces of the facade.



## Bell Structure Repairs



# Ceiling Repairs

To prevent interior damage when removing the roof tiles and installing the sarking, the roof was completed in stages to minimize exposure to the elements and mitigate the risk of internal damage.



# Portico Slab and Rectification

While the elevated wall was being repaired, a propping system was designed to support the entablature – 8 metres above the main entrance portico.

The entablature was repaired with ARDEX BR 345, a Microtec® fibre-reinforced structural concrete patching and repair mortar which contains an active corrosion inhibitor.





**For more information please contact**

**Bill Moisdidis**  
*Director - BellMont Facade Engineering*

P: (02) 9518 0775

M: 0405 430 897

E: [bmoisdidis@bellmont.net](mailto:bmoisdidis@bellmont.net)

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**FACADE ENGINEERING**