

Bayswater Early Years Hub aptly named the community Sunflower is a flagship project for Knox City Council setting the benchmark for Environmental Sustainable Design within the context of local government community education facilities and infrastructure implementation.

Sunflower by K20 Architecture is the result of a highly integrated collaborative approach to triple bottom-line application of sustainable design principals. The resultant vision creates a facility focused on minimising human impact on the environment through an eco-centric design while championing the user experience and surrounding environment as the key drivers for the built space. Sunflower has created a new civic identity and engagement of the local community via reinforced social cohesion by bringing together new early learning spaces, maternal healthcare, allied health, a series of supporting services and community rooms to the existing community reserve containing the local school and a bowling club.

Sunflower's integrated approach to sustainability is evidenced through an impressive 100+ year building lifecycle performance and a vast array of best practice environmental design and planning initiatives demonstrating both passive and active building systems including:

- Innovative internal Building Planning providing structure free floor plates maximising future adaptability and biophilic connectivity of internal spaces to nature
- High performance, healthy, low-embodied energy, building fabric
- High performance low-energy environmental control and monitoring systems
- Net zero operational infrastructure in the form of large-scale renewable energy, plant and storage.

High Performance Integrated WSUD Implementation incorporating rainwater harvesting and on-site retention in support of a comprehensive regenerative native vegetation strategy.

The jury acknowledges Sunflower as demonstrating excellence and innovation through the seemingly balanced integration of process, design and performance within the field of sustainable architecture



**Practice Team:** Anthony Uahwatanasakul (Project Architect), Theodore Kerlidis (Project Architect), India Mitchell (Project Architect)

**Consultant / Construction Team:** Vert Engineering (Structural Engineer), SDP Consulting (Services Consultant), Organica Engineering (ESD Consultant), Hansen Partnership (Landscape Consultant), Philip Chun and Associates (Building Surveyor)

**BUILDER:** Circon Constructions

**Photographer:** Peter Bennetts



In the heritage refurbishment of the Old Quad building at the University of Melbourne, Lovell Chen have woven a subtle magic and built an almost invisible new building within the shell of the old.

The act of improving the environmental performance of existing buildings is of vital importance in improving our cities, especially when so many old buildings have incredibly poor environmental performance. The Old Quad refurbishment is an exemplary demonstration of what is possible, given sufficient skill.

The Old Quad was the first university building in Australia and is of state-level heritage significance. Commenced in 1854, it was designed to be the heart of the University of Melbourne and recent master planning identified the need to re-establish its place at the centre of the university's civic, cultural and ceremonial life. Built of stone, with elaborate Gothic-style windows it was beautiful but felt like a fridge. Over the years insensitive carving up of the spaces had lost the sense of grandeur to the interior.

Using the complementary Green Star and the Passive Haus EnerPhit renovation rating tools, the refurbishment achieves a comfortable temperature all year round and reduces energy consumption by 70–90 per cent while reinstating and celebrating the building's original period features.

The library on the upper floor is of particular note with exposed original columns and elaborate timber trusses. New panelled timber bookcases and patterned carpet based on old linoleum found on site are subtle insertions that help reinstate the original grandeur of the building while hiding the immense scale of the improvement works undertaken.

**Practice Team:** Anne-Marie Treweeke (Project Architect), Milica Tumbas (Passive House Designer), Tina Tam (Project Architect), Natasa Vuletas (Team Member), Peter Lovell (Conservation Consultant)

**Consultant / Construction Team:** Irwinconsult (Structural Engineer), Umow Lai (Services Consultant), du Chateau Chun (Building Surveyor), Slattery (Quantity Surveyor), Aurecon (Project Manager), Glowing Structures (Lighting Consultant), Resonate Acoustics (Acoustic Engineer), Studio Semaphore (Wayfinding and Signage), Chris Love Design (Commercial Kitchen Design)

**BUILDER:** Kane Constructions

**Photographer:** Lovell Chen



Mernda Rail Extension - Stations | Grimshaw



Photographer Michael Kal

The Mernda Rail Extension Project by Grimshaw is a highly commendable public works project demonstrating leadership in environmental sustainable infrastructure by creating new civic identities and connecting three local communities not only to each other but to the greater Melbourne context.

The project's positive impact diverting 5,000 car trips from roads since its opening and enhanced intermodal bus, bicycle and pedestrian connectivity and infrastructure, provides park-and-ride spaces, new walking and cycling paths and a native landscape for community recreation. The project also achieved an Infrastructure Sustainability Council of Australia (ISCA) rating.

**BUILDER:** John Holland

Gillies Hall | Jackson Clements Burrows Architects



Photographer Peter Clarke

Nightingale 2.0 - Fairfield | Six Degrees Architects



Photographer Tass Kelly

The Nightingale model is a robust and exemplary approach to high-density living where sustainability, community and cost are intertwined to achieve a not-for-profit building where the occupants, and the environment, are the winners. This project is no exception and showcases what the Nightingale model is capable of achieving.

On a difficult site and with a very low budget, Six Degrees Architects have created a series of functional and aesthetic spaces. Things like district heating and bulk purchase of renewable energy are highlights along with the recognition that a chance positive encounter with your neighbour is more important to a sense of happiness than glossy finishes.

**BUILDER:** Atelier Projects

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The field of shortlisted projects fell roughly into three main categories with competing heritage, public and residential (multiple housing) projects and three single commercial, educational and urban projects. The nature of the projects saw Nightingale, a true multiple family residential, competing against Gillies Hall student accommodation. The two heritage projects could not have been more different in scale, use and approach to historic preservation and adaptation. Art House and Studio perhaps would have fit more comfortably within residential alterations and additions, where the scope and relative extent of performance and sustainability initiatives would have been more comparable. The commercial office project, 9 Cremorne Street, while demonstrating high-levels of innovation, suffered from its siting and limited application of GBCA criteria to the base build.

Through the virtual visit process, the jury found that Bayswater Early Years Hub and Wunggurrwil Dhurrung were compatible with respect to their programmatic complexity and overall environmental, social and economic performance, setting them apart from entrants in the public architecture category. In the final analysis, the jury decided to award one Named Award, two Architecture Awards and a further three commendations. While all nine shortlisted projects demonstrated very high sustainability credentials, two were demonstrably of lower performance. The overarching rationale for the ranking of projects and associated awards is as follows:

University of Melbourne Old Quad, Bayswater Early Years Hub, and Wunggurrwil Dhurrung all represent absolute best practice environmentally sustainable architecture and technology. Wunggurrwil Dhurrung scoring highest with respect to not only its comprehensive social response owing to its engagement with the Indigenous community, but for its economic performance assessed at less than 30 per cent of the cost of its nearest competitor.

The commendations acknowledge aspiration and performance within the project types: Gillies Hall is a very high performing university housing project from a technical perspective with a substantial construction budget. Mernda Rail Extension is a life changing addition to the urban system and transportation corridor, operating on a regional scale. Nightingale Fairfield represents the third chapter in the program maintaining the high bar previously achieved, which in our opinion should be commended.