

## CASE STUDY

# Jewel Box House

### PROJECT TEAM

**ARCHITECT:** LOVELL CHEN

**BUILDER:** B&B FREIBERG

**INTERIOR DESIGNER:** NEXUS DESIGNS

**LANDSCAPE ARCHITECT:** SIMON ELLIS LANDSCAPE ARCHITECTS

**STRUCTURAL AND CIVIL ENGINEER:** WSP

**BUILDING SURVEYOR:** DU CHATEAU CHUN

**PASSIVE HOUSE CONSULTANT:** GRUN CONSULTING

### PHOTOGRAPHY

TREVOR MEIN AND JAMES GEER

**Heritage Listing:** Heritage Overlay

A tired bungalow in South Yarra has been revived and revitalised. The Arts and Crafts facade of contrasting red brick and pale roughcast render shows much can be achieved by careful removal of unsympathetic paint, while the detached contemporary addition is sensitively designed and scaled to ensure that the heritage house retains its prominence in the streetscape. The renovations have also improved the environmental performance of the house using Passive House methods.

### SIGNIFICANCE OF THE PLACE

Located on a corner site in South Yarra, this single-storey Arts and Crafts home was built around 1921. It is included as a significant building within a precinct Heritage Overlay, which contains a range of contributory buildings from diverse periods and with a mix of architectural styles. The area is subject to external paint controls but there are no limitations on interior changes.

### OPPORTUNITIES

The house is unusual in its presentation to the street, with both street faces designed as principal elevations. The front elevation presents as a fairly conventional bungalow, while the long side elevation includes an ornate entry set within an arched opening with fluted impost blocks. The renovation was an opportunity to revive these street facades and to reinvigorate the interiors. Prior to the renovation, the contrasting material effect of the Arts and Crafts elevations – red tuck-pointed brick walls



**Top** The long elevation has been revived through careful removal of paint, the repair of damaged tuck pointing, the reinstatement of the chimney, and a new brick fence. (Photograph: Trevor Mein)

**Bottom** Pre-renovation street view, with the original colour palette obscured by paint and chimney stack missing. (Photograph courtesy of Lovell Chen)



# LESSONS



- The careful removal of paint and repair of brick tuck pointing has substantially increased the legibility of the heritage exterior.
- Clever replanning of the interior, rebuilding the roof structure and lowering the ceiling has enabled a significant increase in habitable space while maintaining the exterior appearance of the heritage house.
- The new extension is sited within the footprint of the previous garage and ancillary spaces. Clearly contemporary in its expression, it contributes to the streetscape without overwhelming the heritage house.



**Top and Centre right** The three-level addition is clearly distinguished from the heritage house, while relating in terms of form and material. Old and new are connected via a slim two-storey structure of timber screens and glass. **Centre left** A new verandah on the front facade reinstates the original form in a restrained contemporary manner. **Bottom** The ribbon windows and deep reflective eaves of the new study in the top level of the addition. (Photographs: Trevor Mein)

and moulded stringcourse below a broad band of pale roughcast render – was hidden under layers of bland peeling paint. New rooms could be tucked into the volume of the roof space, while the site of the original laundry and garage, and carport built in 1967, was an appropriate location for an extension.

## CHALLENGES

The main design challenges were to increase the floor area within a tight site while maintaining an appropriate street presence. It was important to ensure that the extension read sympathetically in relation to the long elevation, supporting the heritage values of the house and contributing to the neighbourhood streetscape. This required careful consideration of massing and materials. Upgrading the property to the demanding Passive House standard was also a challenge, as the original was 'leaky' in terms of air and heat.

## APPROACH AND OUTCOME

The project had a range of components: the renewal and restoration of the heritage fabric, the creation of new habitable spaces within the roof space of the existing house, an extensive interior refit and an extension housing study, garage and basement.

The robust Arts and Crafts approach to materials and decoration was re-established by careful removal of the unsympathetic paint, repairing damaged tuck pointing, replacing doors and windows to match original configurations, and removing and



replacing the 1954 brick fence. A striking, tall brick chimney, demolished in 1977, was reinstated. A new open verandah recalls the form of the original, which had been filled in to create a sunroom. The interior was reconfigured and extensively refurbished. Contemporary new detailing evokes the Arts and Crafts in its forms and materials: stained-glass windows salvaged from the house are reused in new doors, and a new stained-glass skylight and new William Morris wallpaper and fabric evoke the roots of Arts and Crafts design.

Environmental sustainability objectives were achieved using the Passive House approach. This included adding insulation on the interior against the brick walls to maintain

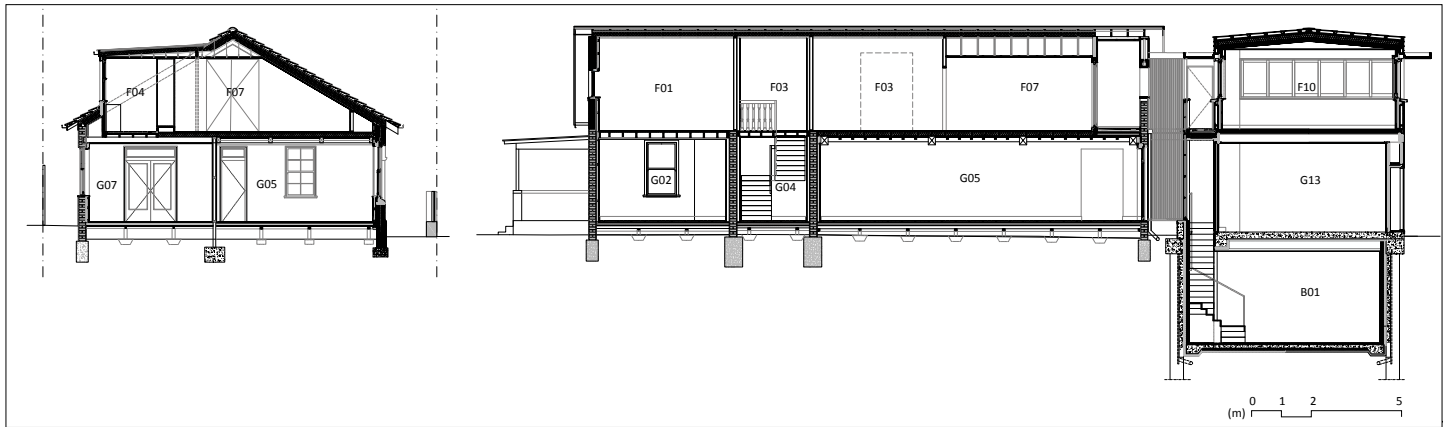
the external presentation and installing high-performance windows throughout, detailed to relate to the originals.

Two new bedrooms were accommodated within the volume of the roof space. The high ceilings of the ground-floor rooms were lowered to 2.7 metres to create enough space above. A new structure was devised to support the roof, which was rebuilt at the same pitch and form as the original. These strategies maximise the habitable floor area without adding excessive bulk to this very visible corner site. Dormer windows on the east side provide light but are mostly hidden from the street.

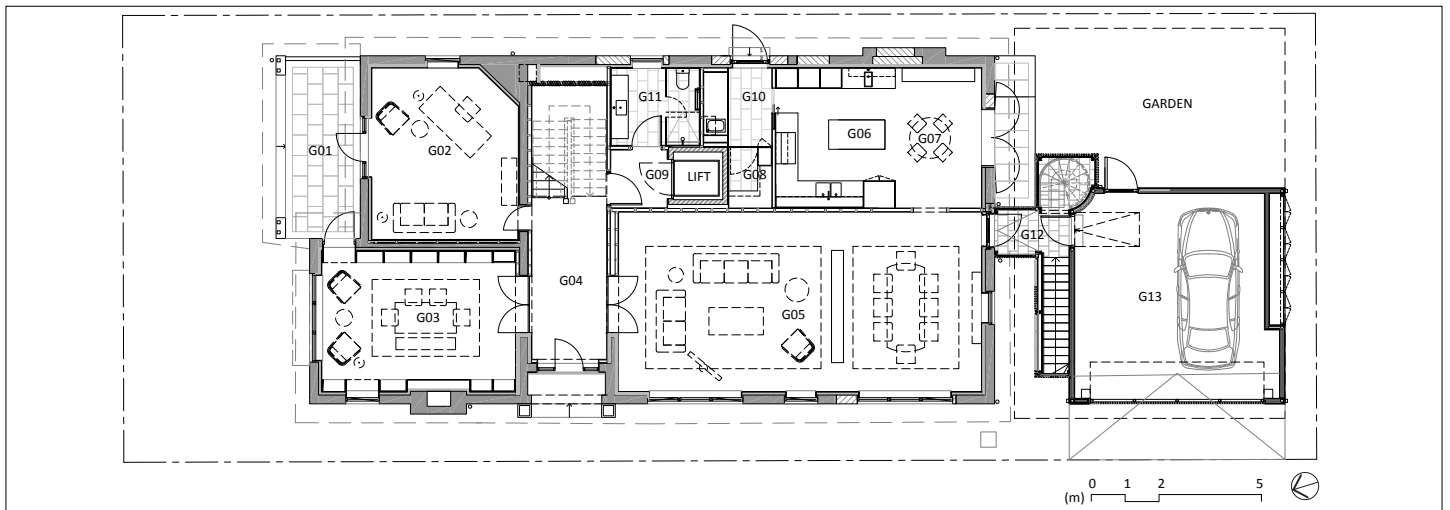
The new three-storey extension is designed as a distinct contemporary element that responds to the materials and proportions of the existing house and sits comfortably within the streetscape. The addition aligns with the west face of the heritage house and fits just below the ridge of the main roof, reading as another tall counterpart to the reinstated chimney. The top floor studio is encircled by a band of timber-framed ribbon windows, above the roughcast facade and below the extended, slightly reflective eaves of the flat roof. Old and new are connected via a slim two-storey structure of timber screens and glass. This houses a new stair, which lands on a new balcony area within the existing volume of the Arts and Crafts house.



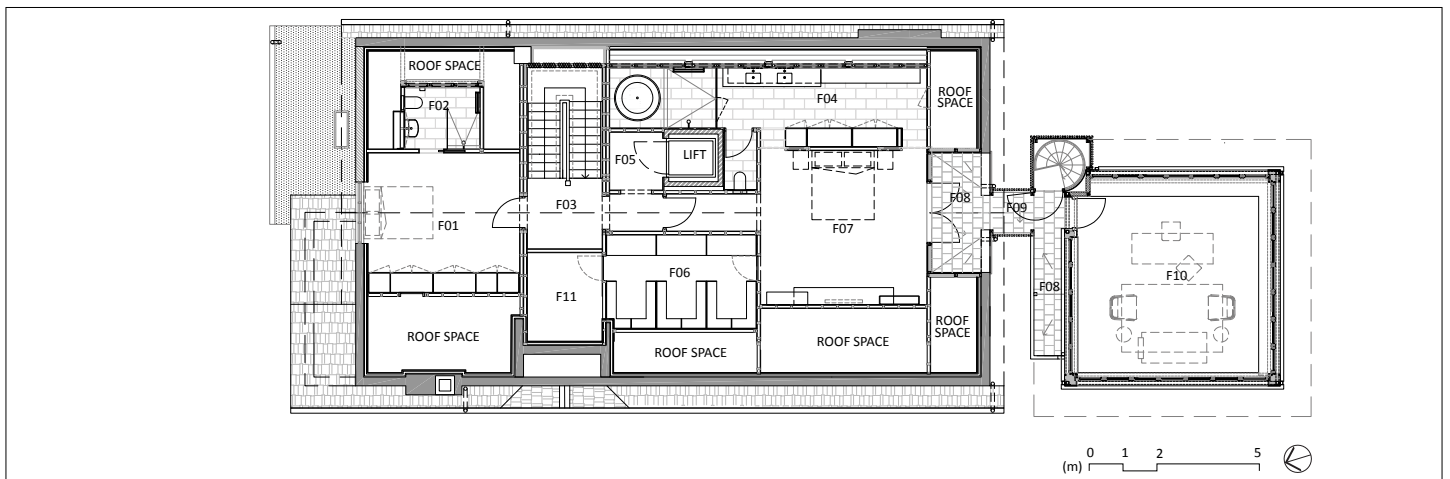
**Top left** The renovated living space, with a lowered ceiling to accommodate the new bedrooms above. **Top right** Interiors are richly coloured and textured invoking an Arts and Crafts approach to design. (Photographs: James Geer) **Left** New stained glass skylight above the new interior stair. **Right** The master bedroom, accommodated within the volume of the roof space of the original building. (Photographs: Trevor Mein)



**Elevation B01** Basement **G02** Study 1 **G04** Entry **G05** Living/dining **G07** Meals **G13** Garage **F01** Bedroom **F03** Hall **F04** Robe/ensuite **F07** Master bedroom **F10** Study 2



**Ground floor plan** **G01** Verandah **G02** Study 1 **G03** Library **G04** Entry **G05** Living/dining **G06** Kitchen **G07** Meals **G08** Pantry **G09** Lobby **G10** Laundry **G11** Bathroom **G12** Link **G13** Garage



**Level one floor plan** **F01** Bedroom **F02** Ensuite **F03** Hall **F04** Ensuite/robe **F05** Lobby **F06** Walk-in robe **F07** Master bedroom **F08** Balcony **F09** Link **F10** Study 2 **F11** Store

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See also the guide 'At home with heritage: a considered approach to renovating your house' that accompanies this case study ([heritagecouncil.vic.gov.au/research-projects/](http://heritagecouncil.vic.gov.au/research-projects/))