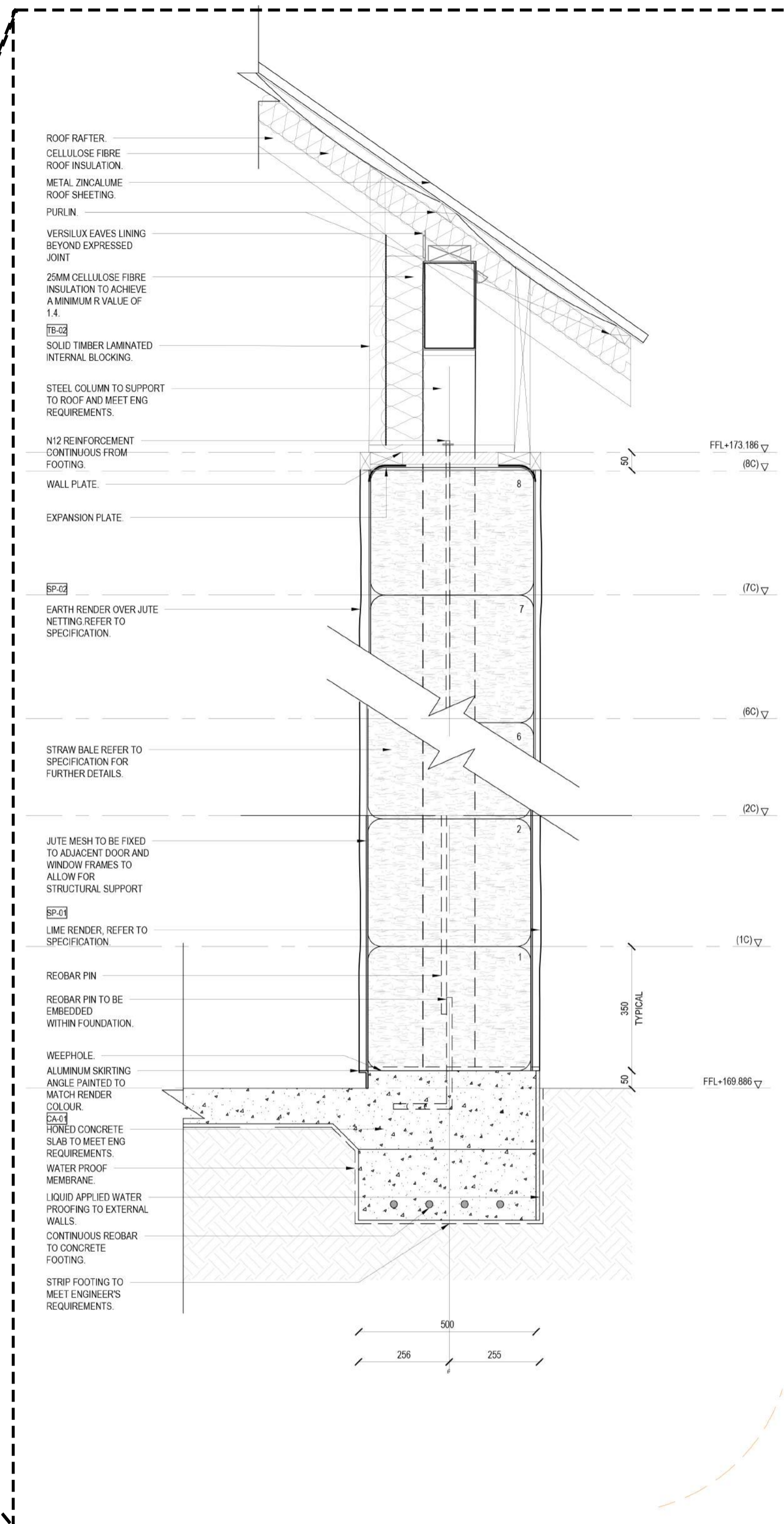


# THE FLOW HOUSE



## PROJECT BRIEF

This project is to be lodged for *Tender Amendment* for demolition of an existing dormitories and the construction of a new amenities/ multiuse building to 1925 Falls Road Hovea. The building is to be a 9b, assembly building as per the NCC. The Hovea Flow is one of multiple buildings that make up a private wellness centre located in the town of Hovea. These buildings offer spaces for meditation, energy healing and yoga classes for people to experience a great sense of inner peace, happiness and harmony. The flow house in particular aims to provide amenities within its overall site scheme.

The materials and structure of the building had originally been documented as rammed earth external walls with timber stud internal walls used to create the parameter of the sanitary facilities located central to the building. The building uses a fitch beam roofing system with a metal deck and concrete slab on ground. Glazing is also a common detail throughout the building in order to create a view directly through, to reveal both the buildings depth as well as the sites surrounding landscapes. This project formed part of a practicum unit that explores the way that an architect declare can be integrated in a practice's work to make it more sustainable and environmentally conscious. For this project, I explored the following architects declare:

*"10. Accelerate the shift to low embodied carbon materials in all our work. Minimise wasteful use of resources in architecture and urban planning, both in quantum and in detail".*

Through the exploration of my chosen declare, I used multiple matrices to explore the existing materials against alternatives to see how I could minimize waste and carbon emissions. Within these matrices the below main systems were explored and changed in order to comply with the architect's declare.

### WALLS

The practicum's building originally specified rammed earth as their wall system of choice. Through my research I compared rammed earth against multiple different environmentally friendly wall systems such as straw bale, hemp masonry and mud brick to see if this was the most fitting for the chosen architect declare. Through this exploration, it was found that straw bale was the most fitting choice due to its minimal waste being an earth product as well as being a waste product, straw also stores carbon which is otherwise released so it is storing emissions that would be release if not use, as straw bales are a waste product. Green House gas emissions are also reduced through the saving in insulation over time.

### GLAZING

The project consisted of large amounts of glazing throughout the building. On the north and south faces, both walls consisted of glazing. Therefore, through reflecting on the architect declare the top half of both faces we swapped out for recycled V joint timber cladding. The east wall consisted of eight 300mm wide windows. Therefore, in order to minimise waste, some windows were taken out and the average glazing size was used to minimise the amount of waste throughout the building. Modification of glazing types were also made through switching to electrochromic glazing on the east and west sides of the building, a fire rated glazing and timber material were also chosen to comply with the BAL29 requirements for the building.

Through these changes to the building, they also reduced the need for refrigerated air-conditioning within the building meaning that I was able to replace this system with ceiling fans.

In order to communicate these changes, I have documented my drawing package as a tender amendment to the practices original drawings to highlight what I had added to the project to meet the requirements of the architects declare. All changes are drawn in orange to indicate what was my own work. All title blocks, dimensions, annotations and details are my original work to document how these changes would be coordinated and built with the rest of the buildings design. Through the specification, I have chosen to specify straw bales as a system exploring how I can minimise the amount of tolerance throughout the building. As well as specifying the application of the render.