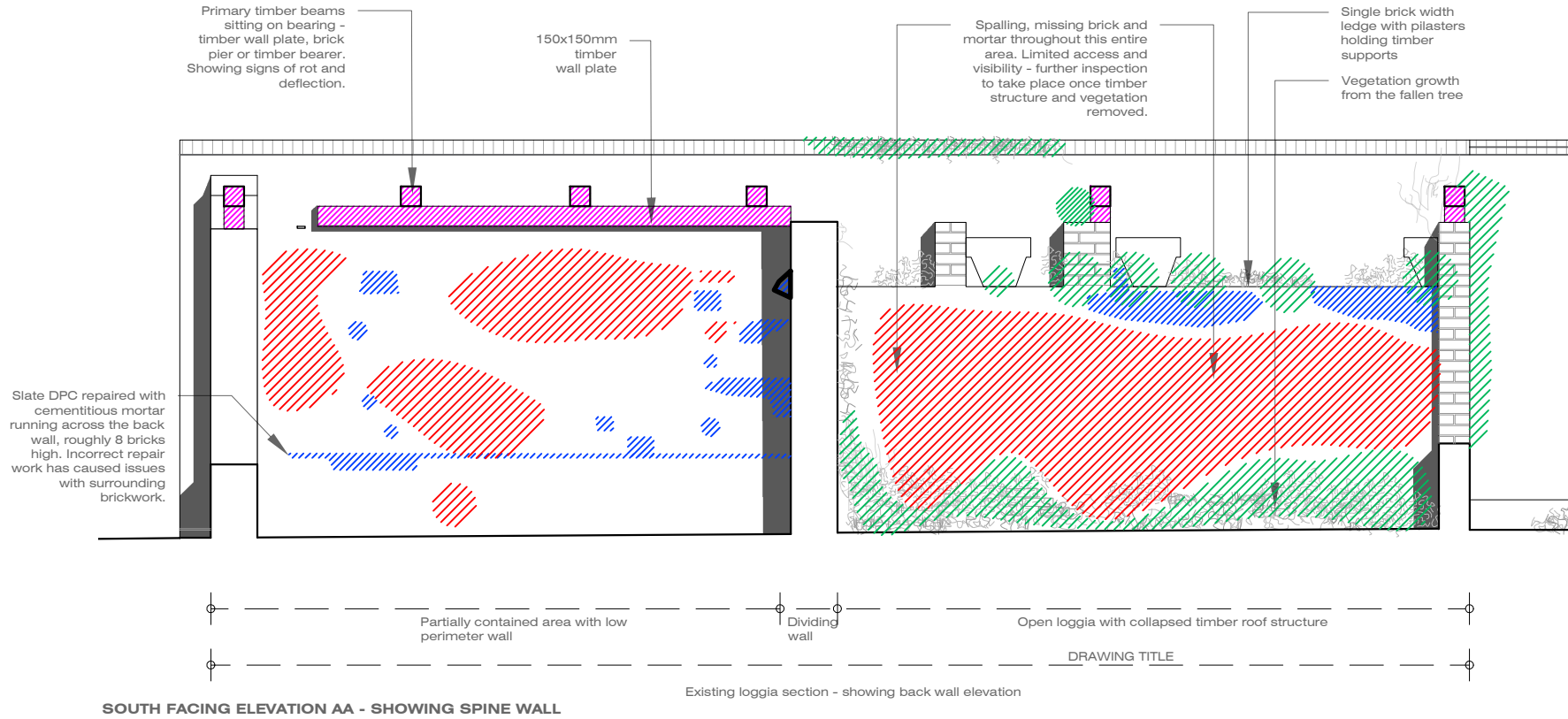
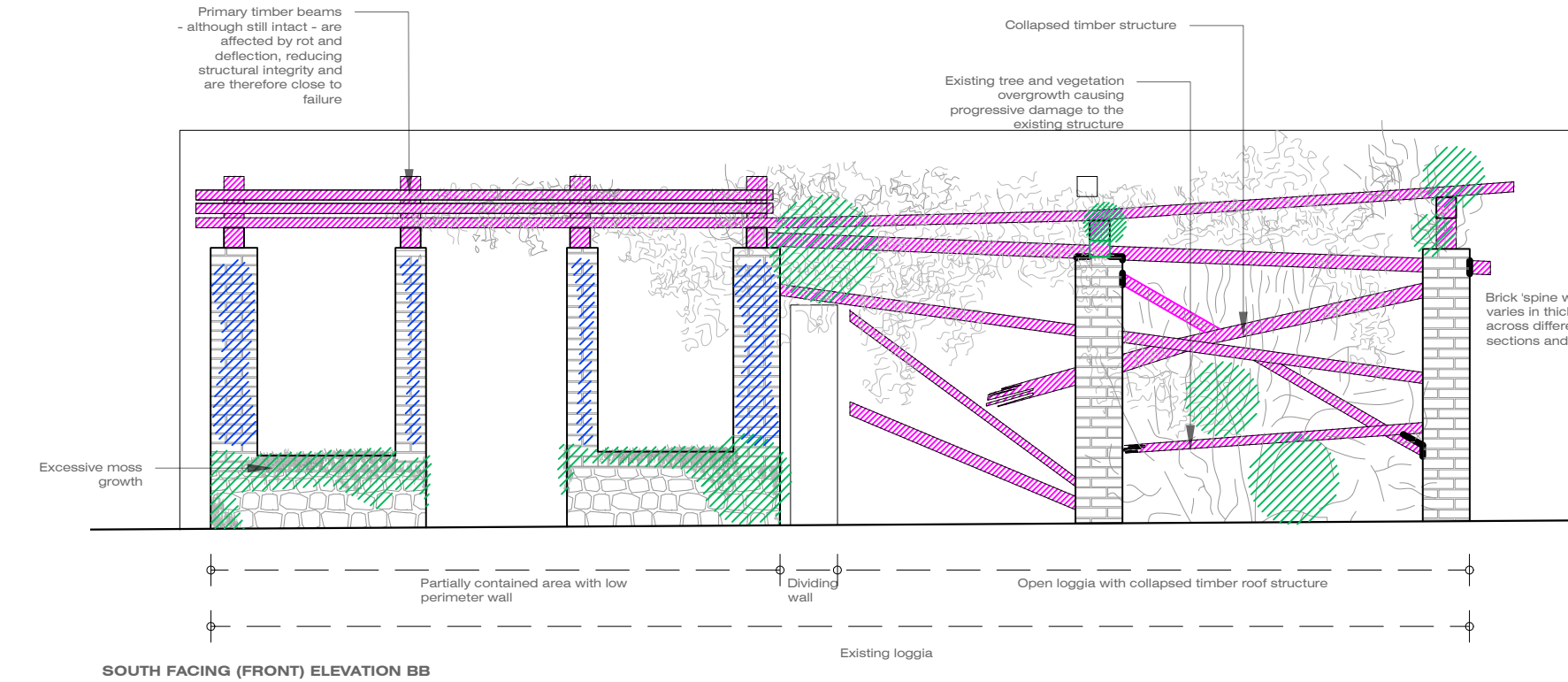




SOUTH FACING ELEVATION AA - SHOWING SPINE WALL



SOUTH FACING (FRONT) ELEVATION BB



1. VIEW SHOWING CONDITION OF BRICK SPINE WALL



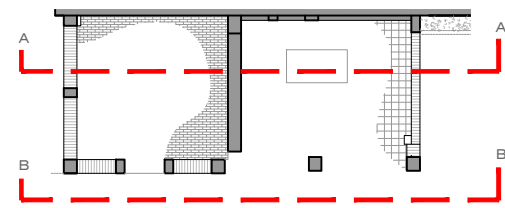
2. VIEW OF CENTRAL BRICK DIVIDING WALL



3. VIEW OF OTHER SIDE OF CENTRAL BRICK DIVIDING WALL (LIMITED ACCESS)



4. VIEW OF SPINE WALL AND COLLAPSED TIMBER STRUCTURE FROM ABOVE



Elevation Plan Key:



LOGGIA DEFECTS:

Summary - The loggia (timber pergola) is in a severely deteriorated condition, with a substantial section having already collapsed and the remaining structure considered close to failure. The principal 150 x 150mm timber beams are affected by significant rot, resulting in a marked reduction in structural capacity and excessive deflection under load. The original beam sizing is relatively modest for the span and has proven inadequate to support the mature wisteria and grape vine growth, contributing to overstressing and progressive failure. In addition, earlier iron brackets built into the adjacent garden wall to support the timber plate have corroded, causing corrosion jacking to the top course of brickwork and the formation of a pronounced horizontal crack. The continued presence of these embedded ferrous elements poses an ongoing risk of further masonry damage.

Additional defects:

Excessive vegetation growth - established wisteria and grape vine planting has grown across the timber roof structure, adding additional weight and stress to the rotten beams, causing complete collapse on one side. Additionally, excessive moss growth of parts of masonry further exacerbate water ingress and stops the masonry from drying out.

Spalled brickwork - There are significant areas of spalled brickwork along the spine wall, primarily attributable to previous repairs undertaken using dense cementitious mortars. These impermeable repairs are incompatible with the original, softer historic brick and lime mortar construction. The cement mortar prevents the natural migration and evaporation of moisture through the joints, forcing moisture to dissipate through the brick faces instead. During freeze-thaw cycles, trapped moisture expands, resulting in surface delamination and loss of the brick face. This mechanism of decay not only erodes the historic fabric but, where extensive, has implications for the long-term durability and structural performance of the wall.

Incorrect mortar repairs - A substantial proportion of the spine wall has been subject to inappropriate cement-based patch repairs, including the infilling of missing bricks with cementitious material. These interventions are visually intrusive and materially incompatible with the original lime-based construction. The rigidity and low permeability of the cement repairs disrupt the wall's intended moisture management strategy, creating localised stress and accelerating brick decay. Such repairs undermine both the material authenticity and the functional performance of the masonry.

Cracks in brickwork - Numerous cracks are present within both mortar joints and brick units. These fissures are likely associated with structural movement, differential loading, and the cumulative effects of moisture-related deterioration. In addition to their structural implications, the cracks create pathways for water ingress, further exacerbating decay within the wall fabric.