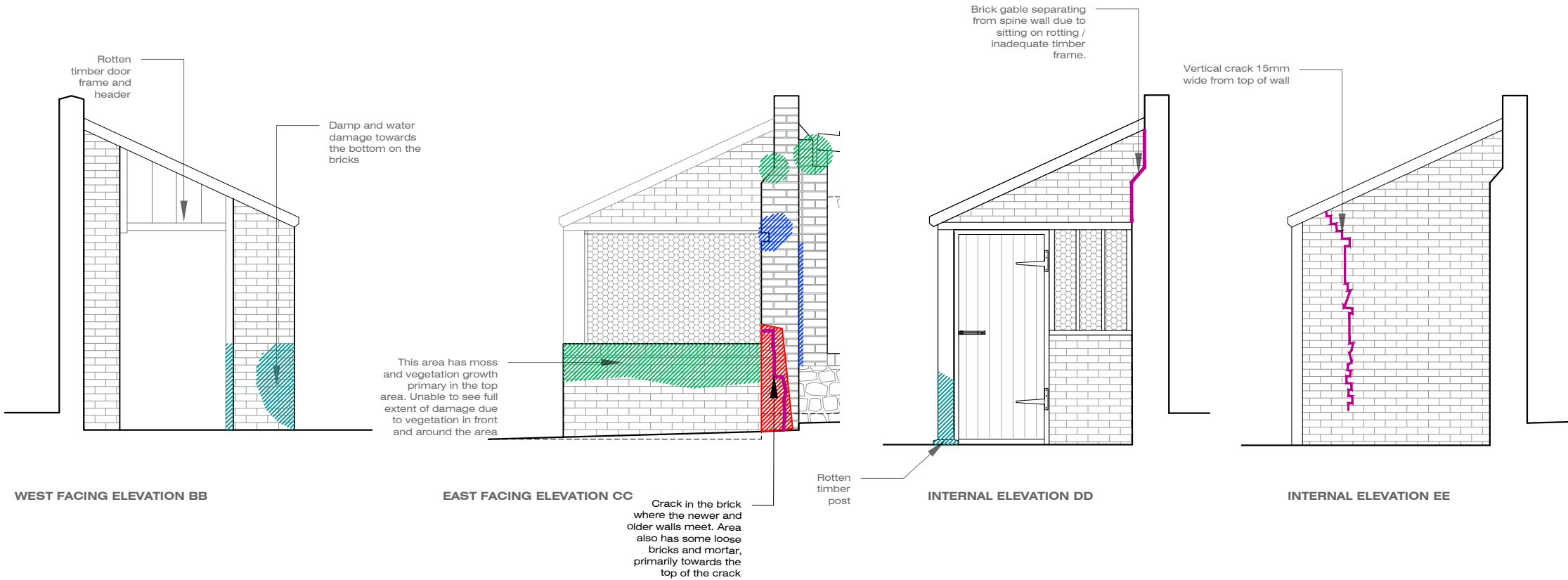
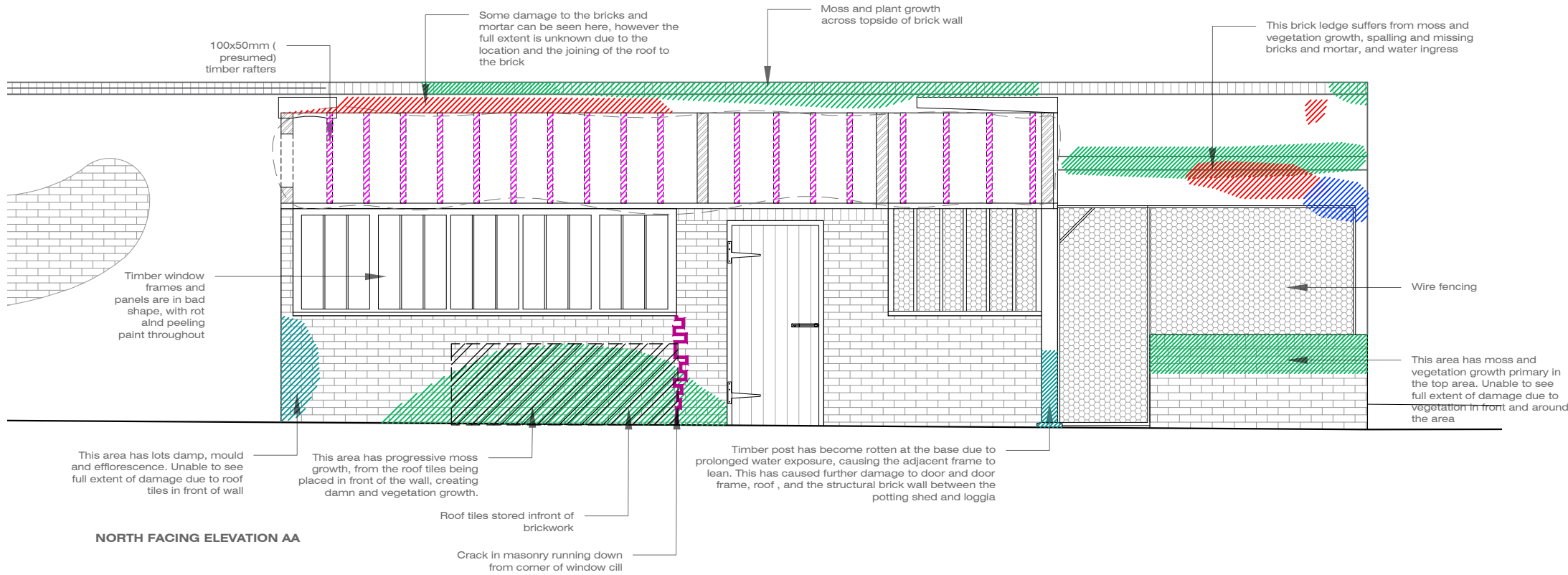




POTTING SHED DEFECTS:

Summary - The Potting Shed is in an advanced state of deterioration, principally due to prolonged water ingress, timber decay and associated structural movement. The failure of the roof covering has allowed persistent moisture penetration, resulting in widespread wet rot and beetle infestation to the timber rafters. Loss of structural integrity at rafter bearings has led to roof spread and outward thrust on the masonry walls, causing displacement and cracking. Localised structural failure at the northwest corner, caused by decay of a supporting timber post, has resulted in differential movement between the end wall and the principal spine wall. The cumulative effect of timber decay, masonry cracking, and inappropriate past interventions has compromised both the structural stability and the material integrity of the building. The defects are interrelated, with moisture ingress acting as the primary driver of decay and structural movement.

Roof Structure

The mono-pitch roof structure is beyond repair. The original softwood rafters (100 x 50mm at approximately 380mm centres) exhibit extensive wet rot and significant beetle infestation. The absence of a waterproof roof covering has left the timbers exposed, accelerating deterioration.

At the junction with the spine wall, rafter bearings have decayed, leading to loss of effective support. This has caused the roof to drop and exert lateral thrust on the supporting masonry. In several locations, rafters no longer adequately bear onto their supports due to geometric distortion caused by structural movement. The roof structure can no longer be considered structurally reliable.

Timber Supports and Wall Plate

The timber support conditions at the head of the masonry wall have failed due to prolonged moisture exposure. Decay at these interfaces has reduced load transfer capacity and contributed to roof spread. At the northwest corner, the end wall is supported in part by a timber post bearing onto a saddle stone. The base of this post has rotted, resulting in vertical displacement and differential settlement. This has caused separation between the end wall and the main brick wall.

Masonry Walls

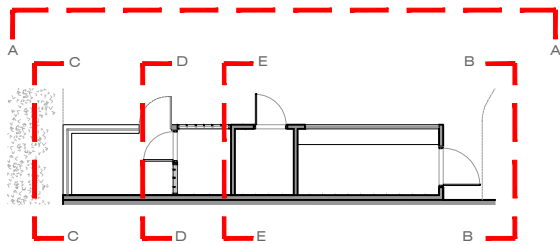
The northwest end wall, constructed in half-brick thickness and largely reliant on a timber frame for stability, has dropped relative to the adjoining structure. A pronounced movement joint has opened between this wall and the spine wall as a result of settlement and timber decay.

Internally, a cross wall exhibits a significant vertical crack, approximately 20mm wide at its head and tapering toward its base. This is consistent with roof spread resulting from loss of bearing at the top of the main wall. The crack compromises both structural stability and weather resistance.

Localised brick deterioration is also present around the former flue opening, and areas of masonry require repointing.

Moisture Ingress and Fabric Decay

The absence of a functioning roof covering has exposed the structure to prolonged moisture ingress. This has been the principal catalyst for timber rot, beetle infestation, and masonry movement. Persistent damp conditions have undermined the durability of both structural timber and brickwork, accelerating the rate of decay. Unless the source of water penetration is addressed, further deterioration will continue.



Elevation Plan Key:



PROJECT: PROPOSED OUTBUILDINGS REPAIR / REPLACEMENT AT OWLETT'S MANSION, COBHAM	CLIENT: NATIONAL TRUST	DRAWING TITLE: EXISTING ELEVATIONS POTTING SHED	DRAWN BY: NF	SCALE: 1:50 @ A3	REV P1 - 06.03.2026 - Final issue	DEFECTS KEY: Cracks in masonry Spalling or missing brickwork / mortar Rotten or unstable timber structure	Improper mortar repairs Areas covered by vegetation - to be further investigated Water Damage, Damp, Mould
			PURPOSE: LISTED BUILDING CONSENT	DATE: FEB 2026			